

**CAPITAL STRUCTURE DETERMINANTS OF PRIVATE SMALL AND
MEDIUM-SIZED ENTERPRISES IN CHINA**

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ABSTRACT

This thesis examines the capital structure determinants of private SMEs in China and the extent to which financial theories of capital structure adequately explain their financing behaviour. It also investigates whether other theoretical perspectives can be utilised to explain their capital structure decisions.

In order to investigate these issues a mixed method approach is utilised, combining analysis of secondary data, with field research in the form of semi-structured interviews and survey questionnaires.

Data analysis indicated that financial theories of capital structure alone do not provide a full explanation as to how SMEs are financed due to distinct institutional and cultural differences between China and the developed economy context in which these theories were developed. In order to better explain the financing behaviour of Chinese SMEs a theoretical model was developed based on insights from interviews with SME owner managers and the existing literature. This model highlighted the role played by managerial strategy, psychology, human capital and network ties in small business financing. Such factors are shown to be influential in determining the capital structure adopted by Chinese SMEs and are not taken into account by existing theories of capital structure in the finance paradigm.

Based on the findings of this research theoretical and policy implications are provided. In order to support the continued growth of the SME sector Chinese government authorities should consider providing better support to entrepreneurs to access the formal financial sector. SME owner/managers must also understand the impact of their behaviour on the ability to access external financing and consider improving their accounting and information systems to reduce information asymmetries between themselves and their lenders.

PUBLICATIONS

One article has been accepted for publication based on work conducted in this dissertation thesis:

Newman, A. Hilton, B. and Gunessee, S. (2011) The Applicability of Financial Theories of Capital Structure to the Chinese Cultural Context: A Study of Privately-Owned SMEs, International Small Business Journal (forthcoming).

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LIST OF CONTENTS

CHAPTER 1: INTRODUCTION 10

1.1	INTRODUCTION	10
1.2	BACKGROUND.....	10
1.3	RESEARCH OBJECTIVES	12
1.4	CONTRIBUTION OF THIS STUDY.....	13
1.5	METHODOLOGY	14
1.6	POLICY AND MANAGERIAL IMPLICATIONS.....	15
1.7	STRUCTURE OF THIS THESIS.....	15

CHAPTER 2: SME DEVELOPMENT AND FINANCING IN CHINA..... 17

2.1	INTRODUCTION	17
2.2	DEFINITION OF SMES	17
2.3	COMPARISON OF SMES AND LARGER ENTERPRISES.....	18
2.4	IMPORTANCE OF SMES FOR ECONOMIC DEVELOPMENT.....	19
2.5	HISTORY OF SME DEVELOPMENT IN CHINA.....	20
2.6	CONTRIBUTION OF SMES TO CHINESE ECONOMIC DEVELOPMENT	21
2.7	CONSTRAINTS ON SME DEVELOPMENT	22
2.8	FINANCIAL CONSTRAINTS ON CHINESE SMES.....	23
2.9	EMPIRICAL STUDIES OF SME FINANCING IN CHINA	23
2.10	IMPACT OF FINANCIAL SECTOR LIBERALISATION ON SME FINANCING.....	24
2.11	BANKING SECTOR REFORM.....	25
2.12	VENTURE CAPITAL INDUSTRY REFORM.....	27
2.13	CAPITAL MARKET REFORM	28
2.14	PREDOMINANCE OF ALTERNATIVE FINANCING MECHANISMS.....	29
2.14.1	<i>Informal lending</i>	29
2.14.2	<i>Financing through business networks: Trade credit.....</i>	30
2.15	CONSTRAINTS TO ACCESSING FINANCE FROM THE BANKING SECTOR	31
2.16	CONSTRAINTS TO ACCESSING EXTERNAL SOURCES OF EQUITY FINANCE	35
2.17	CONCLUSION.....	36

CHAPTER 3: CAPITAL STRUCTURE OF SMES: THEORETICAL AND EMPIRICAL

ANALYSIS 38

3.1	INTRODUCTION	38
3.2	FINANCIAL THEORIES OF CAPITAL STRUCTURE.....	41
3.2.1	<i>The Static Trade-Off Theory.....</i>	42
3.2.2	<i>Asymmetric information and signalling theories</i>	44
3.2.3	<i>The 'Pecking-Order' Theory</i>	44
3.2.4	<i>The 'Financial Growth' or 'Life Cycle' Model.....</i>	49
3.3	ALTERNATIVE THEORETICAL PERSPECTIVES ON CAPITAL STRUCTURE.....	50
3.3.1	<i>Managerial strategy.....</i>	53
3.3.2	<i>Managerial psychology</i>	54
3.3.3	<i>Managerial human capital</i>	55
3.3.4	<i>Network ties</i>	56
3.4	PROPOSED METHODOLOGY.....	61
3.5	CONCLUSION.....	63

**CHAPTER 4: CAPITAL STRUCTURE OF CHINESE SMES: EVIDENCE FROM FIRM-
LEVEL DATA 65**

- 4.1 INTRODUCTION65
- 4.2 THEORETICAL BACKGROUND67
- 4.3 HYPOTHESES DEVELOPMENT68
 - 4.3.1 *Firm size*68
 - 4.3.2 *Firm age*.....69
 - 4.3.3 *Asset structure*71
 - 4.3.4 *Profitability*.....72
 - 4.3.5 *Incorporation*.....73
- 4.4 METHODOLOGY74
 - 4.4.1 *Choice of methods*.....74
 - 4.4.2 *Sample and data collection*.....75
 - 4.4.3 *Variables and econometric specification*.....78
 - 4.4.4 *Descriptive statistics*.....80
- 4.5 EMPIRICAL RESULTS85
 - 4.5.1 *Regression results*.....85
 - 4.5.2 *Regressions with interactive variables*87
 - 4.5.3 *Further regressions*88
- 4.6 DISCUSSION OF FINDINGS90
- 4.7 POLICY AND MANAGERIAL IMPLICATIONS.....94
- 4.8 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH96
- 4.9 CONCLUSION.....98

**CHAPTER 5: CAPITAL STRUCTURE OF SMES: FURTHER INSIGHTS FROM
INTERVIEWS 100**

- 5.1 INTRODUCTION100
- 5.2 RESEARCH QUESTIONS101
- 5.3 METHODOLOGY102
 - 5.3.1 *Choice of methods*.....102
 - 5.3.2 *Sample selection*103
 - 5.3.3 *Data collection*.....104
- 5.4 DATA ANALYSIS108
- 5.5 PRESENTATION AND DISCUSSION OF FINDINGS.....109
 - 5.5.1 *Introduction*.....109
 - 5.5.2 *Internal financing*109
 - 5.5.3 *Bank financing*.....111
 - 5.5.4 *Prevalence of short-term bank financing*113
 - 5.5.5 *Asset structure and capital structure*.....118
 - 5.5.6 *Informal financing*.....121
 - 5.5.7 *Financing via employee loans*124
 - 5.5.8 *Changes in the financing behaviour of SMEs*.....124
 - 5.5.9 *Network ties and SME financing*125
 - 5.5.10 *Financing via business networks*.....126
 - 5.5.11 *Trade credit*127
 - 5.5.12 *Political relationships and financing*.....129
 - 5.5.13 *Bank/firm relationships and financing*134
 - 5.5.14 *Control aversion of owner/manager and financing*.....137
 - 5.5.15 *Strategic objectives and financing*.....139
- 5.6 SUMMARY OF KEY FINDINGS144
- 5.7 POLICY AND MANAGERIAL IMPLICATIONS.....145
- 5.8 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH146
- 5.9 CONCLUSION.....146

CHAPTER 6: RECONCEPTUALISING THE CAPITAL STRUCTURE OF SMES: TOWARDS AN ALTERNATIVE THEORETICAL FRAMEWORK 148

6.1	INTRODUCTION AND THEORETICAL BACKGROUND	148
6.2	HYPOTHESIS DEVELOPMENT	148
6.2.1	<i>Growth intentions</i>	148
6.2.2	<i>Profit maximisation objectives in the short-term</i>	149
6.2.3	<i>Control aversion</i>	150
6.2.4	<i>Risk propensity</i>	151
6.2.5	<i>Educational level of the owner/manager</i>	151
6.2.7	<i>Age of the owner/manager</i>	153
6.2.8	<i>Network ties</i>	154
6.3	METHODOLOGY	156
6.3.1	<i>Choice of methods</i>	156
6.3.2	<i>Sample and data collection</i>	157
6.3.3	<i>Operationalisation of variables</i>	158
6.3.5	<i>Descriptive statistics</i>	161
6.4	RESULTS	167
6.5	DISCUSSION	173
6.6	POLICY AND MANAGERIAL IMPLICATIONS.....	176
6.7	LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH	178
6.8	CONCLUSION.....	179

CHAPTER 7: CONCLUSION 181

7.1	INTRODUCTION	181
7.2	DISCUSSION OF RESEARCH FINDINGS	181
7.3	THEORETICAL AND EMPIRICAL CONTRIBUTIONS OF THIS STUDY	185
7.4	METHODOLOGICAL CONTRIBUTION OF THIS STUDY	188
7.5	POLICY IMPLICATIONS OF THIS STUDY.....	188
7.6	MANAGERIAL IMPLICATIONS OF THIS STUDY	192
7.7	IMPLICATIONS OF THIS STUDY FOR FINANCIAL INSTITUTIONS	193
7.8	LIMITATIONS OF PRESENT STUDY AND SUGGESTIONS FOR FUTURE RESEARCH	193

APPENDICES 195

REFERENCES 212

LIST OF TABLES

Table 2.1: Criteria for defining SMEs..... 18

Table 2.2: Economic contribution of SMEs to Chinese economy 19

Table 4.1: Predicted determinants of capital structure from different theoretical perspectives..... 67

Table 4.2: Gross industrial output of enterprises in Zhejiang 76

Table 4.3: Descriptive statistics and correlations amongst study variables 82

Table 4.4: Summary statistics of variables on industrial basis..... 84

Table 4.5: Regression results..... 86

Table 4.6: Summary of the results..... 87

Table 4.7: Regression results using an interactive variable 88

Table 4.8: Regression results (sole traders and limited liability enterprises)..... 89

Table 5.1: Information on interview respondents..... 106

Table 5.2: Summary of interview findings..... 141

Table 6.1: Financing sources..... 162

Table 6.2: Financing barriers..... 163

Table 6.3: Correlations between variables 166

Table 6.4: Regression results..... 171

Table 6.5: Summary of the results..... 172

LIST OF FIGURES

Figure 2.1: Total factor productivity of Chinese firms.....22

Figure 3.1: The static trade-off theory.....43

Figure 3.2: The pecking-order theory.....45

Figure 3.3: Research design63

Figure 5.1: Process of data analysis109

Figure 6.1: Capital structure determinants of Chinese SMEs. Proposed analytical framework155

Figure 7.1: Theoretical framework for capital structure decision-making.....187

CHAPTER 1: INTRODUCTION

1.1 Introduction

This study adopts an interdisciplinary framework which combines a number of theoretical perspectives to examine the capital structure determinants of private small and medium-sized enterprises (SMEs) in China.

This chapter has six aims:

- To introduce the study,
- To set out its main research objectives,
- To highlight the expected contribution of this study,
- To briefly present the proposed methodology, and
- To set out the expected managerial and policy implications of the study.

1.2 Background

The importance of SMEs to economic development has been well-documented in the literature. They are the global engines behind long-term economic growth and the creation of new employment opportunities in both developed and developing economies (Fritsch and Mueller, 2004; Storey, 1994; Watson, 2006). They are valued for their potential to grow into larger, more productive units; their ability to invest and adopt new technologies; and their ability to adapt to new economic circumstances (Berry et al., 2001). Their contribution to the phenomenal economic growth experienced in China during the past two decades has attracted the attention of many authors (Chen and Feng, 2000; Anderson et al., 2003; Dougherty and Herd, 2005; Chen, 2006). Recent reports estimate that the SME sector accounts for over 55 per cent of Chinese GDP and 75 per cent of employment (Farrell et al., 2006). SMEs are especially dominant in the manufacturing sector, which accounts for more than 40 per cent of China's economic output (Guardian, 2009). They have an important role to play in job creation and are the main driving force for improvements in innovation and productivity (Dougherty and Herd, 2005). As well as being an important source of new urban jobs, SMEs are the main destination for workers laid-off from state-owned enterprises in China (Chen, 2006). According to official reports,

around sixty-five percent of patent registration and eighty percent of new product development in China can be attributed to SMEs (People's Daily, 2008).

How enterprises are financed is an important question in management research as financial capital is essential to the formation and subsequent operation of an enterprise. SMEs with greater access to financial capital are more likely to grow bigger and survive longer (Pissarides, 1999; Wiklund and Shepherd, 2003). The inability to secure adequate sources of finance has been cited as a primary cause of SME failure, especially in the developing economy context where capital markets are underdeveloped (Gaskill and Van Auken, 1993; Van Auken and Neeley, 1996; Coleman, 2000). Previous research indicates that Chinese SMEs face considerable constraints in accessing external sources of finance (Gregory et al., 2000). The capital structure decisions of SMEs, therefore, have important implications for their performance, their ability to succeed, their risk of failure and their potential for future development (Cassar, 2004).

Numerous factors have been shown to influence the capital structure of SMEs (Romano et al., 2000). Existing theoretical frameworks from finance and strategic management set out to explain the determinants of the capital structure of SMEs. These include the static trade-off theory (Scott, 1972; Kraus and Litzenberger, 1973; Kim, 1978), the pecking order theory (Myers, 1984; Myers and Majluf, 1984) and the financial growth cycle theory (Berger and Udell, 1998) from the finance paradigm, and theoretical frameworks developed by several authors in the strategic management paradigm (Barton and Matthews, 1989; Matthews et al., 1994; Romano et al., 2000).

In the past, the lack of available firm-level data made it extremely difficult for researchers to investigate the determinants of the capital structure of Chinese SMEs. Previous empirical work on the determinants of capital structure has overwhelmingly been conducted on listed firms. In recent years the ability to examine the capital structure determinants of SMEs has improved as a result of the growing availability of financial data. Empirical research has been carried out on SMEs in Australia (Cassar and Holmes, 2003; Johnsen and McMahon, 2005), Ireland (Bhaire and Lucey, 2009), Spain (Sorgorb-Mira, 2005), the UK (Jordan et al., 1998; Michaelas et al., 1999; Hall et al., 2000) and the US (Gregory et al., 2005). However, only a limited number of empirical studies have investigated the

capital structure determinants of SMEs in the developing economy context. Preliminary work conducted in Ghana (Abor and Biekpe, 2007), Poland, (Klapper et al., 2006) and Vietnam (Nguyen and Ramachandran, 2006) indicates that the capital structure determinants of SMEs in developing economies differ somewhat from those in developed economies. This suggests a need for further research into what factors determine the capital structure of SMEs in the context of developing economies.

1.3 Research Objectives

The primary aim of this study is to investigate the main factors which determine the capital structure of private SMEs in China. Private SMEs were chosen as the focus of this research study as they face greater constraints than state-owned enterprises to accessing external financing, and make up the overwhelming proportion of registered SMEs in China. Private enterprises refer to organizations which are registered as sole-traders and limited liability enterprises with the Chinese government authorities for taxation purposes. They include those enterprises that were started after 1987, when private ownership was first legalised, and those former state and collectively-owned enterprises privatised since the mid-1990s, known in China as *gaizhi* enterprises (Dong et al., 2006). Enterprises in which the government authorities or state-owned enterprises possess even a minority ownership stake are not classified as private enterprises for the purposes of this research.

Three main research questions are addressed in this study:

1. What are the main determinants of the capital structure of private SMEs in the Chinese context?
2. To what extent are financial theories of capital structure applicable in the Chinese context?
3. What other theoretical perspectives can be used to explain the capital structure adopted by Chinese SMEs?

To answer these questions this research utilises a number of divergent theoretical perspectives to identify both firm-level and managerial factors that influence how SMEs are financed.

Chapter 4 of this study investigates the firm-level determinants of the capital structure of private SMEs

in China. The extent to which existing capital structure theories from the finance paradigm adequately explain the financing behaviour of SMEs in the developing economy context are examined through quantitative analysis of data on 1539 private Chinese firms. The firm-level determinants of a SMEs capital structure in the Chinese context are elaborated upon.

Chapters 5 and 6 investigate the extent to which managerial strategy, psychology, human capital and network ties influence the capital structure of SMEs. Interviews are used to assist in the development of a theoretical model which is tested through data collected from a survey questionnaire.

1.4 Contribution of this Study

This study makes both theoretical and empirical contributions to the literature. In Chapter 4 a contribution is made by examining the applicability of financial theories of capital structure to the Chinese SME sector. Compared to those in developed economies, limited work has been conducted on the financing behaviour of firms in developing economies (Klapper, et al., 2006; Nguyen and Ramachandran, 2006; Abor and Biekpe, 2007). As the world's largest developing economy, China, has received growing attention from both academics and practitioners in recent years. Despite this, SME development in China is a relatively new phenomenon, and as a result is under researched. The difficulties faced in accessing firm-level data on Chinese SMEs have also made it difficult for research to be carried out in this area. Although some research has been conducted on the factors influencing financial leverage in Chinese firms, these studies have been predominantly conducted on firms listed on the Shanghai and Shenzhen stock exchanges (Chen, 2004; Chen and Strange, 2005; Tong and Green, 2005; Huang and Song, 2006; Bhabra et al., 2008) and on larger non-listed manufacturing enterprises (Li et al., 2009).

Previous empirical work conducted in the context of developing economies suggests that theories of capital structure developed to explain SME financing in developed economies are not always applicable to the developing economy context due to institutional differences (Demirguc-Kunt and Maksimovic, 1999; Booth et al., 2001; Fan et al., 2006). Empirical studies investigating the determinants of capital structure in the developing economy context have produced conflicting results, so there is need for further research on the determinants of capital structure of SMEs in this area.

A number of firm-level variables that have been shown to influence the capital structure of SMEs in previous empirical studies are tested as determinants of capital structure. These variables include firm size, firm age, profitability and asset structure. In addition a distinct theoretical contribution is made through the investigation of another variable, incorporation, as a determinant of capital structure. Compared to other firm-level variables there has been limited examination as to how incorporation influences SME financing in the context of developing economies. The analysis of firm-level data provides a deeper understanding as to how the determinants of capital structure for Chinese SMEs differ from those in other countries, and the reasons for such differences.

In Chapters 5 and 6 the study examines how factors other than those posited by financial theories of capital structure determine the capital structure of Chinese SMEs through the development and testing of a theoretical model. The importance of factors such as managerial strategy, psychology, human capital and network ties on the financing decisions of SMEs are investigated. As of present limited research has examined how these variables influence the capital structure of firms in non-Western settings.

1.5 Methodology

Several methods are adopted in this study. Analysis of quantitative data is combined with field research in the form of interviews and a questionnaire survey. In Chapter four secondary analysis is conducted on financial data from 1539 private Chinese SMEs. In Chapters five and six semi-structured interviews and survey questionnaires are adopted to examine the extent to which managerial strategy, psychology, human capital and network ties impact on how Chinese SMEs are financed. Semi-structured interviews with 26 respondents are conducted on a sample of enterprises from the dataset used in the first stage of the research. The interviews findings inform the quantitative analysis of firm-level data, and are used in the development of a survey questionnaire which was distributed to a wider number of enterprises. Together these methods provide a detailed insight into the relative importance of different variables on the capital structure of SMEs.

1.6 Policy and Managerial Implications

This research provides a comprehensive understanding of how SMEs are financed and the types of enterprises that need greater support from the government authorities. It should assist policy makers in developing effective ways of supporting the dynamic SME sector.

The research should also assist SME owner/managers in determining what they might do to improve their ability to access external sources of finance. The importance of building strong social relationships with other firms, government officials and financial institutions to SME financing in China are examined. Suggestions are provided to SMEs as to what strategies they might pursue to improve their access to external sources of financing.

1.7 Structure of this Thesis

In the next chapter of this study the empirical literature on SME development and SME financing are reviewed, with particular reference to the Chinese institutional context. Firstly, the contribution made by the SME sector to Chinese economic development is examined. A detailed review is then made of previous empirical studies on SME financing in the Chinese context, highlighting how the Chinese SME sector has seemingly prospered with limited access to formal sources of financing. The extent to which financial sector reform has impacted on how SMEs are financed is then investigated. Finally, the existing constraints faced by SMEs in accessing adequate sources of external financing are presented.

In Chapter 3 the main theoretical explanations for the capital structure that firms adopt and the applicability of such theories to the SME context are reviewed. Firstly, financial theories of capital structure are presented, namely the static trade-off theory, pecking-order theory and life-cycle model. The extent to which these theories can be applied to explain the financing behaviour of SMEs in the context of developing economies, and more specifically China, are critically examined with reference to the empirical literature. In the second part of this chapter additional perspectives to conventional theories of capital structure are presented. Specifically, the processes by which managerial strategy, psychology, human capital and network ties influence the capital structure of SMEs are examined.

In Chapter 4 the capital structure determinants of Chinese SMEs as hypothesised by financial theories of capital structure are examined through the secondary analysis of a dataset of 1539 firms from Zhejiang province. The relationship between firm characteristics such as size, age, asset structure, profitability and incorporation, and their capital structure are investigated. The findings of this chapter evaluate whether the determinants of Chinese SMEs capital structure are similar to those of SMEs in other countries and what aspects of financial theories of capital structure explain how Chinese firms finance their business activities. The policy and managerial implications of the findings are then discussed.

Chapters 5 and 6 discuss the extent to which managerial strategy, psychology, human capital and network ties impact on the financing decisions of SMEs. The findings of these chapters should provide greater understanding as to which theoretical perspectives best explain how SMEs are financed in the Chinese context. They also help to explain the findings of Chapter 4.

In Chapter 7 the results of the research are discussed, along with the theoretical, methodological, policy and managerial implications of the research. Finally the limitations of the research are presented and suggestions for future research made.

The next chapter starts by examining the background literature on SME development and SME financing.

CHAPTER 2: SME DEVELOPMENT AND FINANCING IN CHINA

2.1 Introduction

This chapter reviews the literature on SME development and SME financing, with particular reference to the Chinese institutional context. Firstly, the contribution made by the SME sector to Chinese economic development is highlighted. The constraints faced by SMEs are then outlined, with specific reference to the difficulties they face in accessing adequate financing to support their business development. A detailed review of previous empirical work on SME financing in the Chinese context, highlights how the Chinese SME sector has seemingly prospered with limited access to formal sources of financing. Following this, the role played by informal financing in the success of Chinese SMEs is discussed. The impact of financial sector reform on SME financing is then examined with particular reference to reform in the banking sector and capital markets. Finally, the existing constraints faced by SMEs in accessing adequate sources of external financing are presented.

2.2 Definition of SMEs

Before reviewing the literature it is important to define the meaning of the term small and medium-sized enterprises (SMEs). Internationally there is no set definition of what constitutes an SME. In the UK the Department of Trade and Industry defines an SME as a firm that has no more than 250 employees. The European Commission defines an SME as a firm with a turnover of less than 40 million Euros, assets of less than 27 million Euros and less than 250 employees. For the purposes of this thesis the definition provided by the Chinese government authorities is utilised. The definition of an SME differs according to the industry in which it operates. Chinese enterprises are classified in three ways: by employee numbers, annual revenue and total assets (see Table 2.1). A unique feature of the Chinese SMEs is their larger employee numbers compared to elsewhere globally. This is hardly surprising, given the country's large population and the labour-intensive characteristics of the SME sector in China.

Table 2.1: Criteria for defining SMEs

Industry	Employees	Annual Revenue	Total Assets
Manufacturing	Less than 2000	Less than 300 million RMB	Less than 400 million RMB
Construction	Less than 3000	Less than 300 million RMB	Less than 400 million RMB
Transportation/Logistics	Less than 3000	Less than 300 million RMB	N/A
Hospitality	Less than 800	Less than 150 million RMB	N/A
Wholesale	Less than 200	Less than 300 million RMB	N/A
Retail	Less than 500	Less than 150 million RMB	N/A

Source: State Statistics Bureau

For the purposes of this study SMEs are defined by annual revenue. Employee numbers are not used as a measure of size as they differ greatly from industry to industry and only private SMEs registered with the government authorities for tax purposes will be included in our study. Foreign-invested enterprises, state-owned enterprises and collective enterprises are excluded from the study.

Private SMEs comprise over 90 per cent of all SMEs. They tend to be constrained in their ability to access external sources of finance to a greater extent than state-owned and collective enterprises, which tend to have better access to bank financing, and foreign-invested enterprises, which tend to access financing from their parent companies or from financial institutions abroad.

2.3 Comparison of SMEs and Larger Enterprises

There are a number of main differences between SMEs and large firms in China. Most SMEs are located in labour-intensive industries whilst larger firms tend to focus more on knowledge or capital intensive industries. This results from the fact that SMEs generally command fewer financial and human resources than large firms (Zeng et al., 2009). These resource constraints are exacerbated by financing and regulatory biases not witnessed to the same extent in mature economies (Dobson et al, 2006; Farrell et al., 2006; Atherton, 2008). This means that Chinese SMEs face greater barriers to developing their own core competencies than their larger Chinese counterparts and SMEs in mature economies (Zeng et al., 2009). As a result they are driven to set up in industries where barriers to entry are relatively low.

Despite the barriers faced by SMEs they also possess a number of advantages over their larger counterparts. They are typically more flexible due to their flat hierarchical structures, and are therefore able to respond more quickly to changes in the external economic environment (Tan, 2001; Siu et al., 2006). As a result the process of new product development tends to be much quicker than in larger firms (Hadjimanolis, 2000).

2.4 Importance of SMEs for Economic Development

The recognition of the importance of SMEs to national economies has led to a large increase in the literature on SME financing in the past two decades. SMEs are the global engines behind long-term economic growth and the creation of new employment opportunities in both developed and developing economies (Fritsch and Mueller, 2004). They are valued for their potential to grow into larger, more productive units; their ability to invest in and adopt new technologies; and their ability to adapt to new economic circumstances (Berry et al., 2001). Table 2.2 illustrates the contribution made by SMEs to the Chinese economy. They accounted for more than 99 per cent of registered enterprises, 77 per cent of all jobs and 66 per cent of industrial output in 2008.

Table 2.2: Economic contribution of SMEs to Chinese economy

Enterprise size	Percentage of registered enterprises	Percentage of employment	Percentage of gross industrial output
SMEs	99.25%	77.7%	66.6%
Large enterprises	0.75%	22.3%	33.4%

Source: China Statistical Yearbook 2008

An expanding body of academic research and insights gained from policy experimentation have led to a growing consensus on the importance of entrepreneurship to economic development in transition economies (Naughton, 2006). The growth of a dynamic and vibrant private sector has played a crucial role in the transition of former centrally-planned economies to market economies (McMillan and Woodruff, 2002).

2.5 History of SME Development in China

As a result of the economic reforms introduced by the Chinese government since 1978 the structure of the Chinese economy has changed fundamentally (Atherton, 2008). There has been a movement away from a centrally planned economic system where economic activity was dominated by large state-owned enterprises towards a socialist market economic system in which the private sector makes a significant contribution to economic activity (Chen and Feng, 2000; Anderson et al., 2003; Atherton, 2008). Changes in government policy towards the private sector have led to a steady growth in the number of private SMEs over the last two decades.

In 1978 reforms gave initial impetus to SME development in rural areas of the country (Chen et al., 2006). In 1981 and 1984 legislation was passed that allowed the registration of private enterprises but prevented them from employing more than seven staff (Atherton, 2008). As a result of these reforms the numbers of *getihu* (private enterprises employing less than eight people) grew significantly during the 1980s. By 1987 the numbers of *getihu* had reached over 20 million. Despite this, regulations prevented private SMEs from employing more than seven workers, enjoying limited liability and pooling their capital (Tang and Ward, 2003). In 1988 the growth in private sector SMEs began to take off with legal recognition of enterprises with seven or more employees under the Provisional Regulations on Private Enterprises (Atherton, 2008). SME development was given a further boost in 1997 when the Fifteenth Communist Party Congress, recognising the importance of SME development to the Chinese economy, gave private enterprises equal rights as state-owned enterprises and initiated the privatisation of state-owned and collective SMEs under the *zhuada fangxiao* policy. From the late 1990s onwards the SMEs have developed quickly becoming the engine of growth in the Chinese economy, especially since China's accession to the WTO in 2001 (Poutziouris et al., 2002; Chen, 2006).

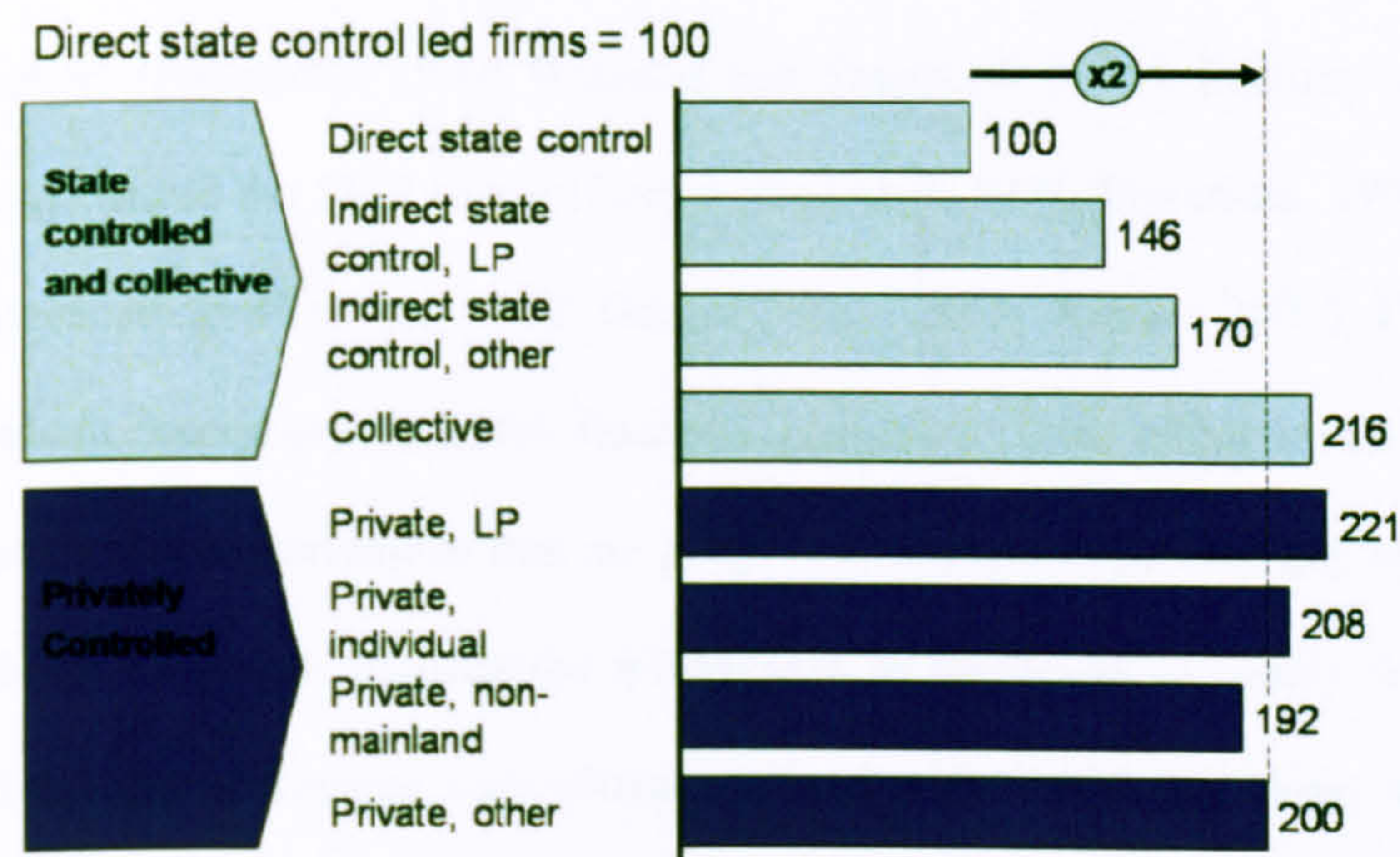
In 2007 the introduction of the Law on Property Rights provided a further boost to the private sector (Atherton, 2008). It enshrined the concept of private ownership into the Chinese law and banned appropriation of business assets by the state. This development marked a significant policy change for the Chinese government. For the first time since the establishment of the People's Republic of China the law had granted equal status to private and public ownership.

2.6 Contribution of SMEs to Chinese Economic Development

The contribution of private SMEs to the phenomenal economic growth experienced in China during the past two decades has been well documented in the literature (Chen and Feng, 2000; Anderson et al., 2003; Chen, 2006; Dougherty and Herd, 2005). By the end of 2005 there were over 42 million SMEs in China, a figure that is growing at an annual rate of 15-20 per cent (Fung et al., 2007). Chinese SMEs play an important role in the provision of new employment opportunities for both new graduates and those laid off from state-owned enterprises (Chen, 2006). They are especially dominant in the manufacturing sector, which contributes more than 40 per cent of China's economic output (Guardian, 2009).

Private SMEs have contributed to economic development through the promotion of competition with larger state-owned enterprises, leading to improvements in productivity and innovative activity (Garnault et al., 2001; Yang, 2004; Dougherty and Herd, 2005). According to official reports, around sixty-five percent of patent registration and eighty percent of new product development in China can be attributed to SMEs (People's Daily, 2008). Growth in total factor productivity in the private sector was considerably higher than that in the state-owned sector during the early years of reform (Perkins, 1996; Jefferson et al. 2000). Differences in productivity levels between private firms and other ownership forms can be seen graphically in Figure 2.1. Compared to other ownership types total factor productivity is much higher in private firms than collective or state-owned firms. For example, total factor productivity in private enterprises (which are predominantly SMEs) was double that of state-owned enterprises in the period from 1998 to 2003 (Dougherty and Herd, 2005).

Figure 2.1: Total factor productivity of Chinese firms



Source: OECD (Dougherty et al. (2005, 2007)), Farrell et al. (2006)

2.7 Constraints on SME Development

The main constraints to the growth of SMEs are thought to result from three primary sources, excessive government regulation, a lack of professional managerial expertise and limited access to finance (Poutziouris et al., 2002). Evidence has shown that regulatory constraints resulting from government bureaucracy place a proportionally high burden on SMEs, especially those in transitional economies such as China (Garnault and Song, 2004; Chen, 2006). It is often a time consuming and bureaucratic process to receive regulatory approval to conduct business activities and regulatory barriers prevent SMEs from entering sectors of the economy in which local governments have a vested interest in protecting state-owned monopolies (Garnault and Song, 2004).

In addition, many SMEs lack professional managerial expertise. They are characterised by informal HRM practices in their recruitment, selection, training, appraisal and retention of employees (De Kok and Uhlaner, 2001; Kotey and Slade, 2005). This impacts on their ability to manage their human resources effectively and is a major factor which influences organizational performance (Carlson et al., 2006; Zheng et al., 2006).

Despite significant regulatory and managerial constraints it is the view of many authors that inadequate access to financing is the primary factor which impacts on the ability of SMEs to grow and survive

(Gaskill and Van Auken, 1993; Van Auken and Neeley, 1996; Coleman, 2000). Previous research indicates that SMEs with greater access to financial capital are more likely to grow bigger and survive longer (Pissarides, 1999; Wiklund and Shepherd, 2003). Existing studies point towards a ‘financing gap’ within the SME sector (Berger and Udell, 1998; Pissarides, 1999; Winborg and Landstrom, 2001; Becchetti and Trovato, 2002; Gregory et al., 2005; Watson, 2006). The finance gap refers to a situation where enterprises lack the financial resources (from either internal or external sources) to exploit profitable opportunities that are presented to them. A finance gap arises when the demand for finance from enterprises exceeds the willingness of financiers to supply funds at current market conditions. Suppliers of finance may choose to undertake credit rationing, due to problems arising from the presence of agency problems and asymmetric information, which may leave significant number of potential borrowers without access to credit.

2.8 Financial Constraints on Chinese SMEs

Previous literature suggests that Chinese private enterprises are amongst the most financially constrained in the world (Huang, 2006). In the World Bank’s 2000-01 survey of 10,000 firms in 81 countries, 66.3 per cent of Chinese firms ranked financing as a major constraint to the operation and development of their business (Batra et al, 2003). This was the second highest figure out of all 81 economies. A survey conducted by the International Finance Corporation on over 600 Chinese enterprises revealed that 80 per cent of enterprises surveyed considered their inability to access external sources of finance to be a major or moderate constraint to business growth (Gregory et al., 2000). In a survey of over 3000 Chinese enterprises conducted by Chinese government authorities 63.32 per cent of enterprises considered it very difficult or quite difficult to obtain bank financing (Bai et al., 2006).

2.9 Empirical Studies of SME Financing in China

Early empirical studies on SME financing in China show that the overwhelming proportion of SME finance came from internal sources (Garnault et al., 2001; Pistrui, 2001; Tam, 2004; Hussain et al., 2006). A survey of over 600 Chinese enterprises in the late 1990s found that over 90 per cent of their initial capital came from the principal owners, the start-up teams and their families (Garnault et al., 2001). Five nationwide surveys on Chinese private enterprises conducted by the China Industrial and

Commercial Union and the Research Committee of Chinese Private Business from the period from 1993-2002 produced similar results (Hussain et al., 2006). The surveys found that internal sources of finance accounted for the majority of start-up funds and that the use of external sources of debt and equity finance by private SMEs was limited.

During the early years of the open-up and reform formal financing mechanisms played a limited role in the financing of private SMEs, not only in the provision of start-up funds, but also in the provision of funds for expansion (Gregory et al., 2000). An IFC survey found that loans from the banking sector accounted for less than ten per cent of the total sources of private SME finance in 1999 (Gregory et al., 2000). The lending behaviour of Chinese banks, especially the big four state-owned banks, tended to be biased in favour of state-owned enterprises (Wei and Wang, 1997). Lardy (1998) states that around 83 per cent of all bank loans went to state-owned enterprises in 1995, the rest divided between private sector enterprises and retail customers.

Comparisons with surveys conducted on SMEs in other countries indicate that Chinese entrepreneurs rely on internal sources of finance to a greater extent than their counterparts in developed and other transition economies (Berger and Udell, 1998; Bratkowski et al., 1999). However, internal sources of finance are typically inadequate to meet the long term growth needs of SMEs, especially in capital intensive growth industries, where external sources of financing need to be sought.

2.10 Impact of Financial Sector Liberalisation on SME Financing

Over the last two decades the Chinese government authorities have implemented a number of reforms aimed at financial sector liberalisation through the loosening of government controls on credit allocation in the banking system and the establishment of new financing mechanisms such as the venture capital industry and the stock market. In theory, financial sector liberalisation, the process of transferring to market-based credit allocation, should result in a reallocation of domestic credit towards private sector SMEs and the substitution of expensive forms of credit for cheaper ones (Cook, 2001). However, the evidence suggests that in China this has not been the case. The financial system is still relatively underdeveloped and inefficient by international standards. Private enterprises still face difficulties in accessing formal sources of finance from the banking sector, venture capital and capital

markets. Previous work highlights how underdeveloped legal and financial systems impact on the financing of Chinese SMEs (Allen et al., 2005; Bai et al., 2006; Ayyagari et al., 2008).

Ayyagari et al. (2008) argue that the weak legal and financial systems in China have led to private enterprises relying predominantly on alternative financing channels, such as loans from informal sources, for short-term financing. They show that enterprises who had access to the formal financial system grew quicker than enterprises with limited access, further evidence to suggest that developed legal and financial systems aid the macroeconomic development of an economy. In contrast, Allen et al. (2005) argue that despite a weak institutional environment Chinese enterprises have been able to grow quickly through the use of alternative financing channels and governance mechanisms based on reputation and relationships. They point out that private enterprises (who have limited access to formal financing channels) have grown much quicker than state-owned enterprises (who have had good access to formal financing). Aziz and Duenwald (2002) support their view arguing that the development of the financial system has not played a major role in promoting the growth of Chinese enterprises. They provide evidence to show that bank loans have been channelled to provinces with heavy proportions of state-owned enterprises. Enterprises in other regions, especially private enterprises have had to rely mainly on retained earnings and informal sources of finance rather than bank loans. They confirm that provinces which received fewer bank loans per head of population actually achieved higher growth rates than those provinces which received a greater proportion.

In the next section the reforms introduced in the Chinese financial sector will be introduced. The extent to which reforms have led to a reallocation of credit from state-owned enterprises to private sector enterprises will also be examined.

2.11 Banking Sector Reform

In the pre-1978 period most Chinese firms were state-owned and received financing from state-owned banks attached to government bureau. All loans were authorised and approved by the government authorities. Capital markets were non-existent and banks acted as organs of the state for introducing state policy. Since 1978 policy makers have introduced a series of reforms aimed at kick-starting economic growth including reform of the banking sector. Bank reform has led to a reallocation of

domestic savings towards financing productive activity and contributed to the high economic growth experienced in China.

Although a small number of banking sector reforms were introduced in the 1980s major banking reforms started in 1994 when the central government made the decision to separate the policy-lending banks from the commercial banks. At this time three state-owned policy banks and four state-owned commercial banks were set up. In the late 1990s and early 2000s the government furthered the process of financial sector liberalisation by granting banking licenses to non-state commercial banks and by removing restrictions on foreign banks from entering the Chinese market as a result of China's WTO accession agreement (Hsu et al., 2005; Hasan and Zhou, 2006). This was done with the aim of increasing competition in the banking system and lead to a reallocation of credit from state-owned enterprises towards the private sector. A growth in numbers of rural credit cooperatives was also encouraged to diversify the banking system and support the development of SMEs, especially in rural areas of the country (Wong and Wong, 2001; Jiang et al., 2009).

As a result of the banking reforms, China's banking system is currently comprised of three policy banks, four state-owned banks, 12 shareholding commercial banks, over 100 city level commercial banks, foreign banks and more than 2000 rural credit cooperatives (Shen et al., 2009). The banking sector plays a central role in China's financial system, accounting for 75 per cent of the capital in the financial system (Jiang et al., 2009). The four state-owned banks continue to dominate the banking sector, accounting for over half of total lending (Herd et al., 2010). The rural credit cooperatives are playing a growing role in the banking system, accounting for around 11 per cent of total loans and 87 per cent of agricultural loans (Shen et al., 2009). They are the dominant financial institution in rural China, channelling savings from rural households into agriculture and manufacturing (Ping, 2003). The market share of foreign banks is low and has only grown slightly since China fulfilled its WTO accession commitments in 2006 (Herd et al., 2010). As a result they only have a limited role to play in financing the SME sector.

Banking reforms although substantial have not been as extensive as some would like (Dobson et al., 2006; Farrell et al., 2006; Brandt and Zhu, 2007). Although the proportion of lending accounted for the

commercial banks, credit cooperatives and foreign banks has risen, the state-owned banks continue to dominate the banking system (Hsu, 2009; Herd et al., 2010). This means that the government continues to maintain significant influence over the banking system. Recent studies indicate that although the share of credit going to SOEs has declined, misdirected lending has continued, with state-owned enterprises and larger private enterprises being given preferential treatment over private SMEs (Dobson et al., 2006; Farrell et al., 2006; Brandt and Zhu, 2007). Although the government and regulatory authorities have encouraged the state-owned banks to improve their lending to SMEs they still continue to lend predominantly to state-owned enterprises, leading to reduced credit availability for the private sector (Dobson et al., 2006; Brandt and Zhu, 2007). Brandt and Zhu (2007) examine banking lending patterns in the period from 1998-2003 and conclude that the state sector, which they have defined to include shareholding companies in which the government have a significant ownership stake, continued to account for between half to two-thirds of all new bank lending. Linton (2006) and Farrell et al. (2006) report that although SMEs account for over 50 per cent of GDP they have only received approximately 10-16 per cent of new bank lending in recent years. In a recent survey of private SMEs in China conducted in 2003, Ayygari et al. (2008) found that only 20 per cent of their funds come from bank financing.

2.12 Venture Capital Industry Reform

The Chinese venture capital industry was established in the 1980s as a result of the central government's decision to promote the reform of state-owned enterprises and the development of high-technology industries (Xiao, 2002; Ahlstrom et al., 2007). In this early period national and local governments encouraged and sponsored venture capital funds to invest in the restructuring of state-owned enterprises and encouraged investment by foreign venture capitalists in selected industries (Ahlstrom et al., 2007). However, most investments met with limited success in this initial period, producing little or no return (Pukthuanthong and Walker, 2007; Ahlstrom et al., 2007).

Despite sluggish growth in the early period China's venture capital industry began to thrive in the early 2000s with continued support from the Chinese government and the private sector, bolstered by the strong performance of the Chinese stock market and international investor interest in China

(Pukthuanthong and Walker, 2007). China is now one of the fastest growing venture capital markets in the world (Ahlstrom et al., 2007).

It has recently been estimated that there are about 250 international venture capital firms in China and a similar number of domestic venture capitalists (Liu et al., 2006). In 2005 alone USD \$4.07 billion was raised by venture capital firms worldwide for investment in China, in addition to USD \$4.8 billion of funds already invested in the country (Aredy, 2006; Ahlstrom et al., 2007). Despite the growth in financing via private equity markets in China SMEs still continue to face huge difficulties in attracting private equity financing, which continues to account for a smaller percentage of SME financing in China than in developed markets.

2.13 Capital Market Reform

During the 1990s the Shanghai and Shenzhen stock exchanges were set up primarily as a means for larger enterprises to raise external capital and as a vehicle to restructure large state-owned enterprises (Gregory et al., 2000; Fung et al., 2007). From only 54 firms listed on the two exchanges in 1992, 1506 firms were listed by 2007, with a total market capitalisation of 31 trillion RMB (KPMG, 2007; Bhabra et al., 2008). Even though restrictions on the listing of private enterprises were removed in 2000, most listed enterprises on these two boards were former state-owned enterprises (Jia et al., 2005). In developed economies access to public equity via the stock market is an important source of finance for SMEs looking for long term access to financial capital. This is especially the case for capital-hungry firms in the high-technology sector (Fung et al., 2007). Mehta and Fung (2004) argue that the capital markets of an economy facilitate the efficient allocation of resources through the provision of a signalling mechanism which reflects underlying information on enterprises that can be assessed by prospective investors. Despite the development of capital markets in China they play a limited role in enterprise financing. Although the Chinese stock markets have been growing rapidly they are small in comparison to those of other economies, with a total market capitalisation of just 17 per cent of GDP in 2005, compared to an average of over 50 per cent in the rest of the world (Farrell et al., 2006).

Since the establishment of the Chinese stock markets in Shanghai and Shenzhen in the 1990s they have had a limited role to play in the provision of capital to SMEs. In 2004 an SME board was set-up in

Shenzhen to provide a greater opportunity for private SMEs to attract outside equity investment. This was followed in 2009 with the establishment of a third board, ChiNext, to provide financing to small high growth technology enterprises. Despite such reforms, as of October 2009 there were only 273 registered enterprises on the SME board and 28 firms on the ChiNext board (Herd et al., 2010).

2.14 Predominance of Alternative Financing Mechanisms

According to cross-country surveys the legal and financial institutions typically associated with growth of the private sector are underdeveloped in China by international standards (Cull et al. 2007). The literature suggests that the private sector in China have been able to achieve substantial growth without the support of formal financing mechanisms (Allen et al., 2005; Cull et al., 2007). Allen et al. (2005) argue that during the early stages of economic growth alternative institutions and financing mechanisms have emerged to support the development of private firms and the overall economy.

2.14.1 Informal lending

Informal financing has played an important role in China's transition from a centrally planned economy to a market based economy over the last three decades (Hsu, 2009). With the development of the market economy the private sector developed rapidly. This led to a huge need for financing that could not be fulfilled by the formal financial system (Jiang, 2009). As a result informal financing sprung up to serve the needs of enterprises with limited access to the formal banking system (Tsai, 2002; Allen et al., 2005; Huang, 2006, Ayygari et al., 2008).

Informal financing consists of all financing activities which operate outside the formal regulatory framework and includes lending from credit unions, credit associations, individual money lenders and pawnbrokers. In most cases such underground institutions function like banks, pooling money from savers together to grant loans to local enterprises at interest rates higher than the bank lending rate (Farrell et al. 2006).

The core-identifying characteristic of informal financing is that it is based on reputation and relationships rather than a formal interaction between a client and financial institution (Allen et al.,

2005; Ayygari et al., 2008; Zhang, 2008). Informal financing in China relies on personal relationships to ensure the effective working of the market and ensure loan default rates are kept low, despite the lack of legal means of redress on non-repayment. Lenders and borrowers usually know each other, through business or social networks and, as a result, are less likely to default on loan repayments for fear of losing their reputation.

Informal financing is usually of a short-term nature and more flexible than formal debt financing from the banking sector which tend to loan money on a long term basis (Gregory et al., 2000). This meets the needs of private SMEs which often require financing of a short term nature to tide them over whilst an order is completed and payment received. In addition the application process is less costly and time consuming than is the case when applying for a bank loan.

In actual fact there is limited information on how informal financing mechanisms work and how much economic activity they support in China. A 2002 survey conducted by the All-China Federation of Industry and Commerce showed that the role of informal methods of financing had increased over time to take the place of formal financing mechanisms (Huang, 2006). The first nationwide survey on informal finance conducted in twenty provinces at the end of 2003 estimated the size of the informal financial sector to be RMB 740-830 billion (OECD, 2005). The survey found that private SMEs rely extensively on informal credit, especially those in poorer Western regions where over 60 per cent of SME financing comes from informal sources compared to 30 per cent in richer areas on the East coast. Li's (2006) 2006 survey of 1150 SMEs in several regions of China revealed that most firms consider informal financing to have significant influence on their business activities.

2.14.2 Financing through business networks: Trade credit

The literature in recent years has begun to examine the role of trade credit as an informal financing mechanism in developing economies where formal financing mechanisms are underdeveloped (Coricelli, 1996; McMillan and Woodruff, 1999; Fisman and Love, 2003; Cull et al., 2007).

Theoretical studies of trade credit attribute the use of trade credit to information advantages that firms have over financial institutions in offering credit to their own customers (Biais and Gollier, 1997;

Petersen and Rajan, 1997). Biais and Gollier (1997) argue that firms without access to finance from banks will resort more to the use of trade credit. Empirical studies have attempted to test these theories through an examination of the determinants of trade credit (Petersen and Rajan, 1997, Ng et al., 1999).

In the Chinese context Brandt and Li (2003) establish that as a result of discrimination from the banking sector private firms resort to more expensive trade credit as a way of financing their business activities. Examining data on 156 private and collective enterprises they conclude that firms with access to bank loans use trade credit to a lesser extent than those without access to bank loans. Ge and Qiu (2007) find that private firms in China use more trade credit for financing purposes than state-owned enterprises. The amount of trade credit received by firms, the accounts payable to sales ratio, ranged from an average of 46.9 per cent for private firms to 13.1 per cent for state-owned enterprises. Their results suggest that in a country with a poorly developed financial sector where access to bank financing is limited private firms are able to support their growth through the use of trade credit. Cull et al. (2007) support their conclusions suggesting that the institutional bias of the Chinese financial system in favour of state-owned enterprises may give rise to trade credit use amongst private firms that have limited or no access to credit from state-owned banks. They argue that trade credit likely provided a substitute for formal bank loans for a firm's trading partners that were shut out of the formal credit market. However, results of their survey suggest that the provision of trade credit was relatively small in size relative to the formal financial sector. Using data of 100,000 firms between the years 1998 to 2003 they find the amount of trade credit provided, accounts receivable to sales ratio, ranged from an average of 18 per cent for private firms to 36.5 per cent for state-owned enterprises.

2.15 Constraints to Accessing Finance from the Banking Sector

Previous studies on the constraints faced by SMEs from accessing financing from the banking sector have largely been conducted in the context of developed economies (Binks and Ennew, 1997; Petersen and Rajan, 1994). In the UK Binks and Ennew (1997) utilise four surveys conducted by the Forum of Private Business to examine the financial constraints that SMEs face in accessing bank financing. These surveys examine the extent to which bank policies and practices constrain small business. High transaction charges, interest rates, collateral requirements and credit availability were the four most serious factors perceived by SMEs to constrain their access to bank financing. In the Chinese context a

survey conducted by the International Finance Corporation found that the inability to meet collateral and/or guarantee requirements was the factor quoted most frequently by Chinese enterprises for not being able to access bank finance (Gregory et al, 2000). Other important factors cited included the lack of a good relationship with the bank and high transaction charges. In the following section the factors that constrain access to bank finance in China will be examined.

According to Farrell et al. (2006) banks have limited incentives, skills and information to lend to SMEs. They cite the limited skills of banks to assess the creditworthiness of SMEs and their ability to price loans according. Banks have found it difficult to assess the creditworthiness of enterprises due to a lack of credit rating agencies in China and the unreliability of SMEs financial statements which banks use to assess their repayment ability. According to Farrell et al. (2006) China has limited coverage from independent credit rating agencies and has yet to introduce a nationwide system for collecting data on the credit history of enterprises. Mu (2002) suggests that a lack of a nationwide credit assessment system for enterprises in China has made banks more reluctant to extend credit to SMEs. Banks are also reluctant to lend to SMEs because of information asymmetries which makes it extremely difficult to verify their creditworthiness, adverse selection problem, or prevent the diversion of funds to alternative projects, moral hazard problem (Berger and Udell, 2002). Bai et al. (2006) argue that the information asymmetry problem is relatively severe for Chinese SMEs as a result of their shorter history compared to many of their larger state-owned counterparts. The informational opaqueness of SMEs compared to larger firms with publicly observable reputations results in the perception that lending to SMEs is a risky business (Bodenhorn, 2003). The potential costs and time involved in collecting information on the creditworthiness of SMEs relative to that of larger firms also puts many banks off from lending to them. When banks are unable to observe the true creditworthiness of the SME they are may be more likely to discriminate against them on the basis of ownership form (Brandt and Li, 2003).

The transaction charges involved in seeking debt finance per unit lent are extremely high for SMEs. The high costs of evaluating and monitoring the creditworthiness and subsequent performance mean that SMEs are unable to benefit from economies of scale in financing to the extent that larger firms are able to do so (Binks and Ennew, 1997; Cassar, 2004). There is evidence to show that high transaction

costs may effectively limit the ability of some SMEs to access long-term debt financing from the banking sector (Cassar, 2004; Titman and Wessels, 1988). Titman and Wessels (1988) find that smaller firms use of short-term financing mechanisms such as trade credit or overdrafts rather than long-term debt results from the high transaction costs associated with the issuance of long term debt. Chinese SMEs are subject to a number of transaction charges in the course of applying for a bank loan. These include the costs of registering collateral, application charges and expenses used in building relationships with bank officials (Gregory et al., 2000). There is evidence to suggest that transaction costs faced by SMEs in China are much higher than would be the case for SMEs in economies with developed financial systems as a result of complicated and time consuming application procedures. In the past state-owned banks levied excessive charges on loan applications as a way of circumventing strict interest rate controls when dealing with private SMEs (Gregory et al., 2000).

In recent years the Chinese government deregulated the range of lending rates to allow banks to charge higher interest rates to their customers (Wu, 2005; Podpiera, 2006). Since October 2004 commercial banks have been allowed to charge at any rate more than 0.9 times the benchmark rate (Dobson et al., 2006; Podpiera, 2006). The liberalisation of interest rates, in theory, should improve the incentive for commercial banks to increase lending to 'higher risk' SMEs. Despite this, evidence shows that the loan pricing of state-owned commercial banks has not changed significantly since the liberalisation of interest rates (Podpiera, 2006; Garcia-Herrero et al., 2006). Podpiera (2006) suggests that banks may be unwilling to price to reflect risk as it may impact negatively on its weakest customers.

A lack of sufficient collateral also constrains Chinese SMEs from accessing bank loans. Chinese banks generally require collateral as security for the loan or for the loan to be guaranteed by a third party in order to resolve information asymmetries. Asymmetric information models view collateral as a signalling or risk reduction mechanism (Hanley and Crook, 2005). The literature suggests that pledging collateral may help resolve asymmetric information problems where there is a lack of shared information between the lender and the borrower (Stiglitz and Weiss, 1981; Chan and Kanatas; 1985). Collateral enables banks to offer credit to firms whose informational opaqueness and lack of reputation may otherwise result in them being refused credit (Berger and Udell, 1998). In a survey conducted by the International Finance Corporation on over 600 Chinese enterprises collateral requirements were

seen as the most serious constraint to their ability to access bank financing (Gregory et al., 2000). Under Chinese banking regulations various forms of assets including land, buildings, houses, apartments, savings instruments and equipment can be used as collateral. In practice, however, real estate and land use rights are the assets most commonly accepted by banks (Gregory et al., 2000). Chinese SMEs, many who do not have their own land or buildings, find it difficult to meet the onerous requirements for collateral imposed by banks. Tam (2004) argues that a lack of assets that can be used as collateral is one of the main problems that results in a low proportion of lending to private sector SMEs.

A number of reforms were introduced by Chinese authorities in order to improve SME access to bank finance. The State Economic Trade Commission (SETC) was given the responsibility nationally for supporting SME development. The credit guarantee system, a nationwide network of 200 government sponsored credit-guarantee organisations, was established under the auspices of the SETC in the late 1990s with a guarantee fund of 10 billion Yuan. In addition to government sponsored agencies, member-funded SME guarantee mutual funds and private credit guarantee companies are able to provide credit guarantees services to SMEs (Mu, 2002). Despite the introduction of the credit guarantee system it has not been as effective as hoped. Fung et al., (2007) cite the strict criteria imposed on SMEs by the SETC meant that very few of them were able to qualify for the guarantee service. They also point to evidence from research by the State Council that credit guarantee organisations continue to support large enterprises over smaller ones. Mu (2002) suggests that local governments tend to use credit guarantee agencies to achieve their own objectives such as reducing unemployment and allowing cash-strapped enterprises to survive rather than support the development of the innovative SME sector. He also suggests a lack of prudent government supervision over credit guarantee organisations has limited their effectiveness in supporting SME development.

The lack of flexibility in the loan provision of Chinese commercial banks has been cited as another factor that constrains SMEs from seeking bank financing (Gregory et al., 2000). The financing needs of many SMEs are short-term and seasonal whereas loans provided by commercial banks tend to be medium to long-term (Gregory et al., 2000; Tam, 2004).

2.16 Constraints to Accessing External Sources of Equity Finance

Previous studies on the constraints faced by SMEs in accessing external equity financing have largely been conducted in the context of developed economies (Berggren et al., 2000). Limited research has been conducted on the constraints to accessing external equity finance in the Chinese context. In the following section the factors that constrain access to equity finance in China will be examined.

Chinese SMEs are generally unaware of the opportunities open to them in terms of developing their companies through taking on equity partners and accessing capital markets. The short history and limited spread of the venture capital and private equity industries, especially in regional areas of China, mean that many SME owner/managers have no knowledge and experience of how to undertake the process of seeking outside investment in their enterprises.

Government regulations prevent Chinese SMEs from taking on foreign equity partners in certain sectors of the economy. Such regulations make the process of investing in Chinese SMEs an extremely complex process for foreign-owned venture capital and private equity funds. Government approval must be given in all cases in which a foreign party takes an equity stake in a Chinese enterprise. Government regulations also make it difficult for SMEs to access equity investment through listing on the stock market. Until 2000 a quota system restricted the number of firms from each province that could list on the stock-exchange (Tam, 2004). Despite reforms being introduced that have widened access to equity markets for private enterprises priority for listing tends to be given to state-owned enterprises. Over 90 per cent of listed enterprises in 2005 were former state-owned enterprises (KPMG, 2006). Stringent listing requirements and quota restrictions continue to prevent private SMEs from seeking entry to the stock market to raise funds (Fung et al., 2007).

The limited availability and accuracy of information is an issue of concern for external equity investors when conducting due diligence on Chinese enterprises (Pukthuanthong and Walker, 2007; Bruton and Ahlstrom, 2003). The presence of asymmetric information resulting from a lack of transparent financial and accounting systems in many Chinese enterprises makes it difficult for external investors to assess their true financial position. Although the Chinese government has introduced regulatory reforms to bring its accounting standards up to international norms, accounting regulations are not always

properly enforced (Pukthuanthong and Walker, 2007). As a result external equity investors will spend a great deal of time in collecting and analysing information on the enterprise from a variety of sources, before deciding whether or not to invest. The high costs of conducting due diligence prior to investment and monitoring after investment is undertaken put off many external financiers from investing in Chinese SMEs.

Another factor that puts off many SMEs from seeking external equity partners are the potentially high costs that will be incurred during the process of seeking outside equity from external investors, and preparing for listing on the stock market (Cassar, 2004). In order to meet the disclosure requirements of outside investors firms have to invest a great deal of resources in improving their financial and accounting practices (Pukthuanthong and Walker, 2007).

Empirical studies show that SME owners tend to be control averse, preferring to utilise internal sources of finance through a fear that external sources of finance will lead to a loss of control over the firm and limit the ability of the owner/manager to make decisions independently (Harvey and Evans, 1995; Hutchinson, 1995; Berger and Udell, 1998). In the Chinese context there is general reluctance on the part SME owner/managers to allow outside investment which may result in reduced independence through the involvement of venture capitalists in day-to-day decision making (Pukthuanthong and Walker, 2007).

2.17 Conclusion

In this chapter the literature on SME development and SME financing was reviewed with particular reference to the Chinese institutional context in order to provide a background for the following chapters of this study. Firstly, the contribution made by the SME sector to Chinese economic development was highlighted in order to justify the importance of the research project. A detailed review was then made of previous empirical work on SME financing in the Chinese context, highlighted the constraints faced by SMEs in accessing finance and how the SME sector has seemingly prospered with limited access to formal sources of financing. The role played by informal financing in the success of Chinese SMEs was then discussed, and the impact of financial sector reform on SME financing examined, with particular reference to reform in the banking sector and capital markets. In

reviewing the existing body of literature the major differences between SME financing in China and other countries were examined. This provided a basis on which the applicability of capital structure theories developed in the West to Chinese firms could be discussed in the following chapter.

In the following chapter the theoretical and empirical literature on capital structure will be reviewed, with specific reference to previous work in the developing economy and Chinese contexts. As well as reviewing the financial theories of capital structure and their applicability to Chinese SMEs, a number of alternative theoretical positions that may assist in explaining the financing decisions of SMEs will be introduced. In doing this the gaps in the existing literature the contributions of the existing study will be highlighted.

CHAPTER 3: CAPITAL STRUCTURE OF SMES: THEORETICAL AND EMPIRICAL ANALYSIS

3.1 Introduction

Capital structure has been defined as the mixture of debt and equity used to finance the business activities of a firm (Myers, 1994). The ability to gain adequate access to financial capital enables SMEs to establish and subsequently operate effectively. The capital structure decisions of SMEs therefore have important implications for their performance, their ability to succeed, their risk of failure and their potential for future development.

As outlined in the previous chapter the financing decisions of SMEs have important implications given the role they play in the promotion of economic growth, innovation and provision of new employment opportunities in the Chinese economy. In order for Chinese policy makers to develop effective policies to improve access to financing for SMEs and for managers to understand what can be done to improve access to financing, it is imperative to understand what factors drive the capital structure decisions of Chinese SMEs.

Several major financial theories have been developed to explain the capital structures that firms adopt. These theories include the static trade-off theory, the pecking-order theory and the life cycle model, and are supported by a substantial body of empirical work on larger publicly-listed firms. Compared to their smaller counterparts such firms have greater access to national and international capital markets, and are as a result less subject to the institutional constraints imposed by their domestic financial systems (Myers, 2001; Li et al., 2009). Financial information on such firms is also readily available as they are legally required to disclose accounting and financial information to the general public.

Compared to larger firms, the extent to which financial theories of capital structure are applicable to SMEs has received less attention (Norton, 1990; Ang, 1991; Ang 1992). This is mainly due to the limited availability of financial data on SMEs, especially those in developing economies. During the last decade researchers have begun to examine the capital structure determinants of SMEs with

preliminary work being conducted in Australia (Zoppa and McMahon, 2002; Cassar and Holmes, 2003; Johnsen and McMahon, 2005), Ireland (Bhaired and Lucey, 2009), Spain (Sorgorb-Mira, 2005), Sweden (Ortqvist et al., 2006), the UK (Jordan et al., 1998; Michaelas et al., 1999; Hall et al., 2000) and the US (Gregory et al., 2005). Only in the last five years studies have begun to examine the applicability of financial theories of capital structure to SMEs in developing economies, with work being conducted in Ghana (Abor and Biekpe, 2007), Poland (Klapper et al., 2006) and Vietnam (Nguyen and Ramachandran, 2006). These studies unsurprisingly produce conflicting results from Western studies, so a study on China, the world's largest developing economy, may yield results to help explain why such differences might exist. Klapper et al. (2006) argue that financial theories of capital structure, developed to explain the financing behaviour of firms in developed countries, might not be applicable in developing economies due to institutional and cultural differences. One institutional difference that has been shown to influence the capital structure of enterprises is the level of development of a country's legal and financial systems (Demirguc-Kunt and Maksimovic, 1999; Booth et al., 2001; Fan et al., 2006). Demirguc-Kunt and Maksimovic (1999) find that in economies with weak investor protection firms are more likely to employ short-term debt than long-term debt in their capital structure. Booth et al. (2001), investigating the capital structure of firms in 10 developing economies, find that the institutional structures of each economy impacts on the amount of long-term and short-term debt employed by firms in their capital structure. The findings of the above studies may be explained by the fact that limited investor protection in countries with weak legal systems and underdeveloped financial markets reduces the incentive for external financiers to invest in firms, thus influencing the capital structures they adopt (King and Levine, 1993; La Porta et al., 1997; Levine and Zervos, 1998).

Although a significant amount of research has examined the applicability of capital structure theories to large Chinese firms (Chen, 2004; Chen and Strange, 2005; Tong and Green, 2005; Van Gennip, 2005; Huang and Song, 2006; Bhabra et al., 2008; Qian et al., 2009) no study has established their applicability to SMEs in China. The present study intends to address this issue. In the following sections financial theories of capital structure are reviewed in light of existing empirical evidence. The relevance of these theories to explaining the financing behaviour of Chinese SMEs will be examined, taking into account institutional and cultural factors that are unique to China.

China is a country where one has to expect the capital structures of firms to differ significantly from what might be observed elsewhere. Firstly, whilst developing, it is heavily industrialised and in economic transition from state socialism to a “market economy with Chinese characteristics” (Tan, 2005). Secondly, it has large stock exchanges which are subject to significant state control. They are used primarily as a mechanism to restructure former state-owned enterprises, not as efficient capital markets on which successful private companies can list (Fung et al., 2007). Non state-owned firms in China are only able to seek an IPO with considerable state patronage as opposed to the efficient competitive commercial criteria that governs market listing in developed markets. Thirdly, whilst China has an extensive banking system with a significant number of national and local banks, the banking sector is still subject to state influence (Farrell et al., 2006; Brandt and Zhu, 2007; Hsu, 2009). Compared to mature economies, private enterprises, especially those small and medium in size, face major constraints in accessing financing from the banking sector (Allen et al., 2005; Bai et al., 2006; Ayyagari et al., 2008). Recent work reveals that although the private sector accounts for over 50 per cent of GDP it receives less than 20 per cent of new direct bank lending (Farrell et al., 2006). Fourthly, there is a tendency amongst Chinese individuals to sustain high levels of savings, which have been estimated to account for around 40 per cent of average incomes in the period 1992-2005 (He and Cao, 2007). This high savings rate is spurred by the uncertainties that have arisen as a result of the economic transition and restructuring of state-owned enterprises that has led to the removal of the “iron rice bowl”, the system of cradle to grave welfare provided by the state. A great proportion of these savings are directed into small family enterprises through informal financing networks, allowing individuals to physically sustain control in agriculture, manufacturing or trade (Tsai, 2002; Allen et al., 2005). Indeed recent work suggests that informal financing accounts for around 40 per cent of private sector financing in China (Li, 2009a). As a result of these factors the applicability of existing financial theories of capital structure, developed to explain the financing behaviour of firms in mature economies, to the Chinese SME context, must be brought into question.

A key purpose of this study is to develop and highlight additional theoretical perspectives that might assist in explaining the financing decisions of Chinese SMEs. In addition to looking at the applicability of financial theories of capital structure to the Chinese context this chapter will therefore examine other theoretical perspectives as diverse as strategic management, psychology and sociology that may assist

in the understanding of the capital structure that SMEs adopt. Recent work suggests that financial theories alone do not provide an adequate explanation for the financing behaviour of SMEs (Barton and Matthews, 1989; Matthews et al., 1994; Romano et al., 2000).

3.2 Financial Theories of Capital Structure

Contemporary capital structure theory builds on the seminal work of Modigliani and Miller (1958) who under the assumptions of perfect capital markets, put forward a model to suggest that any change in a firm's capital structure has no impact on the value of a firm. Modigliani and Miller's work on the irrelevance of capital structure assumes that firms operate in a completely free and competitive market without taxes or transaction costs, where information is completely transparent and available without cost. As a result there is no optimal method of financing under this model.

When the assumption of perfect capital markets is dropped the capital structure of a firm becomes relevant. Modigliani and Miller's (1958) work has spurred a great deal of theoretical work on the determinants of capital structure. Financial theories have been advanced to deal with factors such as taxes, agency costs, costs of financial distress and asymmetric information that might cause deviations from their efficient market hypothesis (Romano et al, 2000). Such theories fall into three main categories: tax-based theories, agency cost theories, and asymmetric information and signalling theories.

In recent years, three pragmatic theories have added to the knowledge of capital structure. The static trade-off theory builds on both tax-based theories and agency cost theories to explain how firms make financing decisions. It is designed to deal with the distortions likely to be caused by taxation (Scott, 1972; Kraus and Litzenberger, 1973; Kim, 1978) and the possibility of the discontinuity caused by bankruptcy. The pecking-order theory (Myers, 1984; Myers and Majluf; 1984) and financial growth cycle theory (Berger and Udell, 1998; Timmons, 2004) adopt elements of asymmetric information and signalling theories. They are advanced to cope with the distortions that may be caused by asymmetric information between firms and their potential lenders. In the following paragraphs the potential applicability of each of these theories to the Chinese SME context are reviewed in light of existing empirical evidence.

3.2.1 The Static Trade-Off Theory

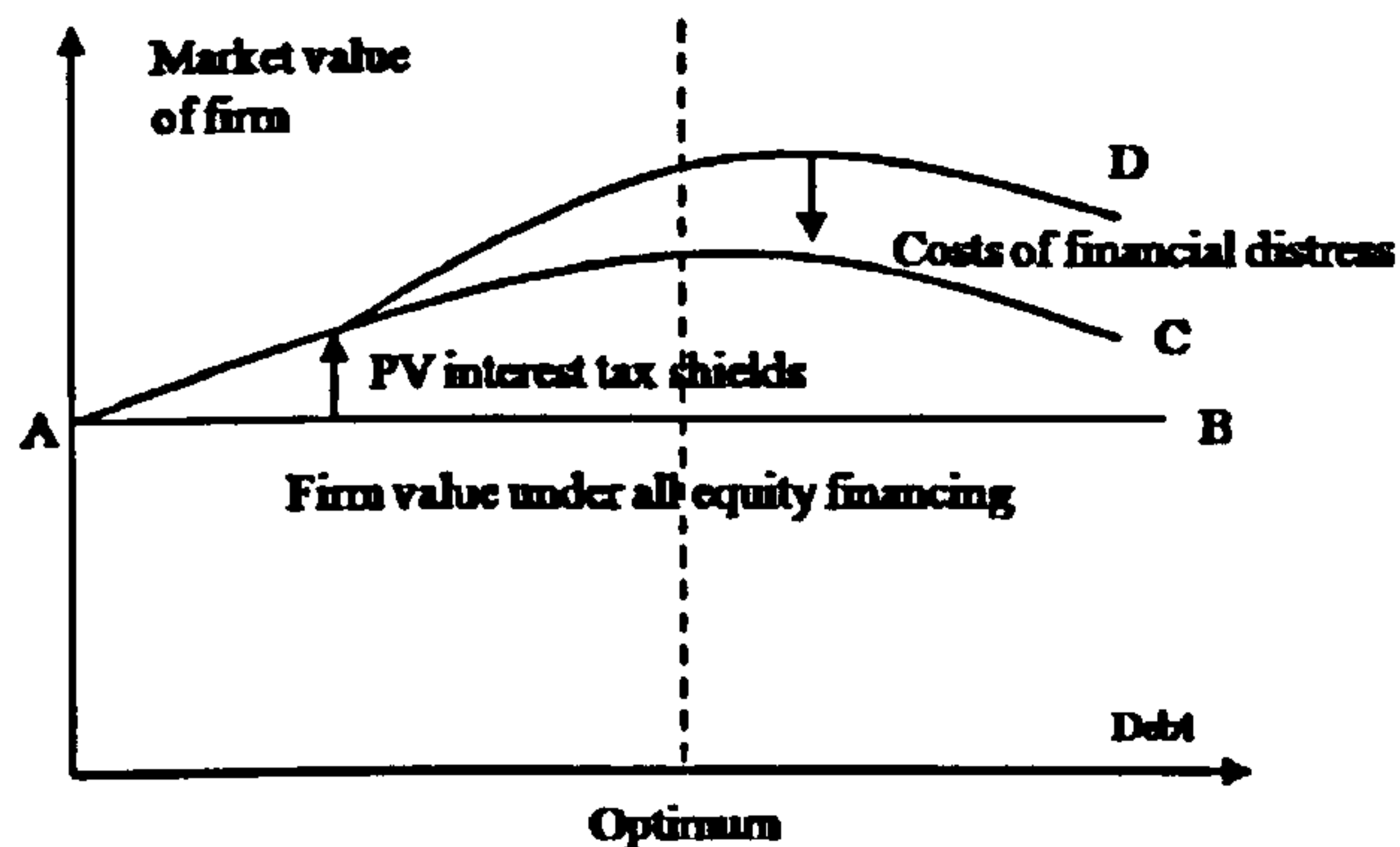
The static trade-off theory builds on the work of Modigliani and Miller (1958) to propose the existence of an optimal capital structure for each firm, assuming the management of a firm will aim to maintain an optimal debt/equity ratio in making capital structure decisions to minimise the costs of prevailing market imperfections (Scott, 1972; Kraus and Litzenberger, 1973; Kim, 1978). These market imperfections include the tax shield benefits of debt finance, and the agency and financial distress costs of maintaining high debt levels (Bradley et al, 1984; Harris and Raviv, 1990).

According to tax-based theories of capital structure, the tax benefits of using debt and bankruptcy considerations impact on the financing decisions of a firm (Mackie-Mason, 1990; Graham, 1996; Graham, 2000). Tax-paying firms are assumed to prefer debt over equity financing due to the fact that interest payments on debt are tax deductible. Although tax benefits may encourage firms to use increasing amounts of debt in their capital structure, this may lead to an increase in the costs of financial distress and agency costs, putting opposing pressure on firms to avoid debt.

Financial distress costs arise when the likelihood that the firm may default on loan repayments is greater than zero. The costs of financial distress will typically rise as a firm uses increasing amounts of debt in their capital structure, and banks adjust the costs of a loan to take into account the potential risk that a company may go bankrupt. Agency costs, resulting from the conflict of interest between equity and debt holders due to asymmetry in risk-sharing, also rise as firms increase the amount of debt in their capital structure (Jensen and Meckling, 1976; Harris and Raviv, 1990). Equity holders tend to prefer risky investments with a high rate of return whilst debt holders tend to prefer less risky investments with guaranteed returns. Agency costs result from the need for debt-holders to monitor the behaviour of the equity holders in order to protect their own interests. Costly monitoring devices are therefore often incorporated into loan agreements which result in higher costs of capital.

Under the static trade-off theory, firms trade-off the benefits and disadvantages of debt financing to maintain an optimal debt-equity ratio. Firms identify their optimal leverage by weighing-up the benefits and costs of using debt. This is illustrated by Figure 3.1 below:

Figure 3.1: The static trade-off theory



Source: Myers, 1984

In the diagram the straight line AB shows the market value of the firm under the Modigliani and Miller (1958) regime, in which the value of the firm is irrelevant and the capital structure is equal to the value of an all-equity firm. If a firm uses debt in their capital structure they have to pay interest which is generally tax deductible. Interest payments act as a tax shield and allow the firm to increase its value. As the firm takes more debt its value increases (curve AC). However, after a certain proportion of debt (the optimum level) the value of the firm starts to decrease as the costs of debt start to outweigh the benefits of debt. Curve AD illustrates how the costs of financial distress rise as firms use increasing amounts of debt in their capital structure. At higher levels of debt the interest payments of firms increase to cover for the potential risk of financial distress. Firms trade-off the tax benefits that may be gained through using debt with costs of financial distress and agency costs to maintain an optimal level of debt in their capital structure as shown in the diagram.

Although there is empirical evidence to suggest that the static trade-off theory might provide a reasonable explanation for the financing behaviour of larger firms in developed economies (Taggart, 1977; Marsh, 1982; Bradley et al., 1984; Jalilvand and Harris, 1984) there is weak support for its applicability to SMEs both in developed and developing economies (Holmes and Kent, 1991; Norton, 1991; Watson and Wilson, 2002; Klapper et al., 2006). Watson and Wilson (2002: 560) argue the explanatory power of the static trade-off theory is 'typically low' and results of empirical studies 'not always supportive'. This might result from the difficulties faced by SMEs in accessing adequate sources of debt financing compared to larger enterprises which renders managers unable to trade-off

the benefits and costs of debt. Indeed, previous work indicates that SME owners tend to operate without targeting an optimal debt/equity ratio (Holmes and Kent, 1991).

In the Chinese context, the applicability of the static trade-off theory to explaining the financing decisions of larger firms is brought into question of the basis of the existing literature. Recent empirical work on large, publicly-listed firms produces findings contrary to the predictions of the static trade-off theory (Chen, 2004; Chen and Strange, 2005). Chen (2004:1348) highlights why this might be the case, ‘this is because the fundamental institutional assumptions underpinning the Western models are not valid in China’. She then goes on to argue that significant legal and institutional differences which exist in the Chinese transitional economy play a significant role in influencing the capital structure of firms in China. These include state control over the economy and government ownership of listed firms, as well as political influence over the banking and securities industries. On the basis of this evidence it seems unlikely that the static trade-off theory will provide an adequate explanation for the capital structures adopted by SMEs. Indeed, in China where SMEs have limited access to formal debt and equity markets one has to expect a further attenuation in its explicative power.

3.2.2 Asymmetric information and signalling theories

The pecking order theory and the ‘financial growth’ or ‘life cycle’ model of capital structure have been forwarded to explain how firms make their capital structure decisions. These theories are based on asymmetric information and signalling theories, under which firm managers are assumed to have greater information on the future prospects of the firm as regards future revenues and investment opportunities than outside investors.

3.2.3 The ‘Pecking-Order’ Theory

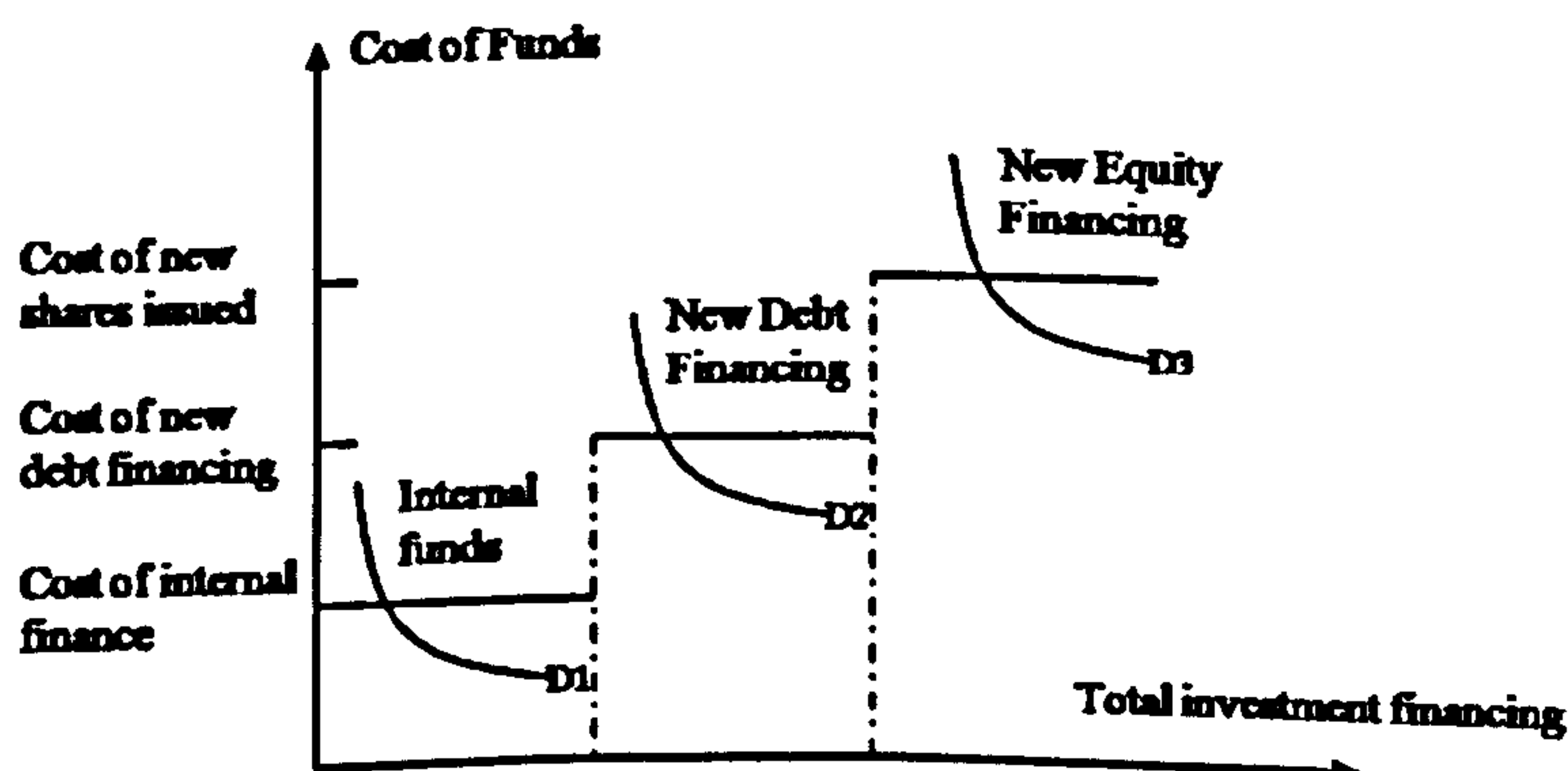
Theoretically, firms who issue equity will suffer from underpricing as a result of the information asymmetry that exists between investors and managers (Myers, 1984; Myers and Majluf, 1984). The market will either overvalue or undervalue any new equity that is issued as a result of information asymmetries between the firm managers and outside investors. As a result, the market will tend to assume that managers, acting in the firm’s best interests, will only issue new equity when they believe

it to be overvalued, in order to maximise the value of the firm. This will trigger a reduction in the share price, leading to undervaluation of the firm's true worth. This results in managers favouring the use of internal funds and debt over external equity in the firm's capital structure. The work of Ross (1977) builds on asymmetric information theory to show how high debt levels act as a signalling device to outside investors as to the firm's ability to fulfil its debt obligations.

Based on these ideas Myers (1984) and Myers and Majluf (1984) develop the pecking-order theory to explain how enterprises make decisions regarding capital structure. The pecking-order theory works under the assumption that managers take into account the information asymmetry that exists between managers and outside investors when deciding on how to finance the business. Capital structure decisions are made to mitigate the inefficiencies that arise as a result of asymmetric information. According to the pecking-order theory firms order their financing choices in a hierarchical pecking order, exhausting internal sources of finance first, before using debt financing second and issuing equity as a last resort (Myers, 1984). Under the pecking-order theory firms will prefer to use internal finance first as it is not subject to asymmetric information problems and is, as a result, cheaper than new debt or equity. If external financing is needed, firms will first issue debt which is less susceptible to undervaluation due to information asymmetries, over external sources of equity. Finally when all internal financing and debt options are exhausted firms will issue new equity as a last resort. Under the pecking-order theory there is no optimal capital structure that maximises the value of the firm.

The pecking-order theory is illustrated by Figure 3.2 below:

Figure 3.2: The pecking-order theory



Source: Fazzari et al. (1988)

In the diagram demand for finance is represented by D1, D2 and D3. When demand for finance is low at D1 investment is financed through internal funds, which are cheaper than external sources of finance. When demand for finance is relatively high at D2 external debt financing is utilised once internal sources of finance have been exhausted. Finally, if demand for finance is very high at D3 firms will finance via issuing equity once internal funds and debt financing have been exhausted.

Early empirical studies on the pecking-order theory concentrated on investigating its applicability to large firms with limited attention paid to SMEs. In recent years a growing number of researchers have sought to establish whether the pecking-order theory can assist in explaining the capital structures adopted by SMEs (Jordan et al., 1998; Berggren et al., 2000; Howorth, 2001; Watson and Wilson, 2002; Zoppa and McMahon, 2002; Cassar and Holmes, 2004; Hogan and Hutson, 2005; Sorgorb-Mira, 2005; Paul et al., 2007). The general conclusion from this work is that it provides a better explanation than competing theories for the capital structures adopted by SMEs. Paul et al. (2007) argue that two main factors might provide a convincing rationale for the applicability of the pecking-order theory to SMEs. Firstly, SMEs exhibit significantly higher levels of asymmetric information than large firms, especially those with a relatively short-history, due to a lack of historical performance data on which financiers can make investment decisions (Binks and Ennew, 1996; Cressy, 1996; Hall et al., 2000; Reid, 1996). Secondly, the owner/managers of SMEs tend to exhibit strong aversion to losing control over their business activities that the introduction of new financiers might entail (Berggren et al., 2000; Paul et al., 2007). This leads to a strong preference for financing options that minimise intrusion into their business activities. Despite a general consensus that the pecking order approach does a better job at explaining the financing behaviour of SMEs than earlier theory, the results of empirical evidence are mixed (Chittenden et al., 1996; Atherton, 2009). Several researchers argue that SMEs are subject to a more extreme version of the pecking order theory (Ang, 1991; Holmes and Kent, 1991; Howorth, 2001; Paul et al., 2007) than that put forward by Myers (1984). This is labelled by Holmes and Kent (1991) as a 'constrained' pecking order, by Ang (1991) as a 'modified' pecking order and by Howarth (2001) as a 'truncated' pecking order. These versions of the pecking-order theory result from the fact that SMEs tend to rely overwhelmingly on internal sources of finance in the start-up and development phases and have limited access to capital markets and other large-scale equity investment. Empirical

evidence is beginning to emerge of a wide range of alternative pecking orders (Atherton, 2009) arising from the different evolutionary experiences of firms. This explains why earlier studies (Chittenden et al., 1996) found no evidence of a specific pecking-order in the financing preferences of firms.

There has been limited research examining the applicability of the pecking order theory to SMEs in developing economies. Evidence from two recent studies suggests that the predictions of the pecking-order theory might be valid outside the context of mature economies (Klapper et al., 2006; Abor and Biekpe, 2007). Klapper et al. (2006) examine the capital structure determinants of Polish SMEs using a large dataset containing over 17,000 observations. In line with the pecking order theory that find that firm size, growth and asset structure are positively related to leverage, and profitability negatively related. Their findings suggest that firms follow a pecking order, initially relying on internal sources of funds before seeking bank financing, and only issuing equity as a last resort. Abor and Biekpe (2007) use financial data on 105 enterprises over a six year period to examine what determines the use of bank financing by Ghanaian SMEs. They find positive relationships between firm size, age, asset structure, and bank financing, and a negative relationship between firm profitability and bank financing. Their findings indicate that SME financing follows a pecking order of internal financing in the early stages of development followed by bank financing over time as firms grow in size.

Due to the empirical support in favour of the pecking-order theory in both developed and developing economies it is suspected that the pecking-order theory of financing will provide a better explanation of the financing behaviour of Chinese SMEs than the static trade-off theory. Recent empirical work on larger Chinese firms provides some support for this assumption (Chen, 2004; Tong and Green, 2005; Van Gennip, 2005; Huang and Song, 2006). Tong and Green (2005) analyse financial data on 44 listed companies. They find that firm size and growth are positively related, and profitability negatively related to leverage, in line with the predictions of the pecking order theory. Work by Chen (2004) on 88 listed firms for the period 1995-2000 also provides partial support for the pecking order theory. Although she argues that neither the static trade-off theory nor the pecking-order theory comes close to providing a full explanation for the capital structure of Chinese firms, she emphasises that the pecking order provides a better explanation on the basis of her findings. She then argues that the capital choice decisions of Chinese firms follow a different pecking-order than in the West; retained profits, followed

by new equity and lastly debt. Three later studies provide further empirical support for a pecking-order in the financing of large firms in China. Van Gennip (2005) examines the capital structure determinants of 371 firms listed on the Shenzhen Stock Exchange in the period 1999-2003. He finds that leverage is positively related to growth and size, and negatively related to profitability in line with the predictions of the pecking-order theory. However, contrary to such predictions he finds no evidence of a relationship between asset structure and leverage. Huang and Song (2006) analyse the financial data of 1200 Chinese listed firms for the period 1994-2003. They find that leverage is positively related to firm size and asset structure, and negatively related to profitability, non-debt tax shields, growth opportunities and managerial shareholdings, confirming several of the hypothesised predictions of the pecking-order theory. Bhabra et al. (2008) examine data on listed firms on the Shanghai and Shenzhen stock exchanges for the period 1992-2001. In line with Huang and Song (2006) they find that leverage is positively related to firm size and asset structure and negatively related to profitability and growth opportunities, providing partial support for a pecking-order in the financing preferences of firms. In contrast Chen and Strange (2005) argue that neither the static trade-off nor pecking-order theories are applicable in the Chinese context due to legal, cultural and institutional differences between China and Western countries where such theories were developed. They find that leverage is positively related to firm size, length of stock-market listing and firm risk, and negatively related to profitability. In contrast to previous studies they find no relationship between firm growth and leverage and the opposite relationship between business risk and leverage than hypothesized by financial theories of capital structure.

Myer's version of the pecking-order theory might not fully explain the financing behaviour of Chinese SMEs for two major reasons. The fact that SMEs continue to face significant constraints in accessing external finance in China means that they may face greater difficulties in moving up the pecking order of financing sources than may be supposed in theory (Allen et al., 2005; Ayyagari et al., 2008). These constraints are exacerbated by asymmetric information problems between SMEs and their lenders, which tend to be relatively more severe than in the context of mature economies (Bai et al., 2006). The fact that informal finance is more widely available in China as compared to other developing and mature economies, due to the high levels of domestic savings, might also negate the need for SMEs to seek financing formally from the banking sector (He and Cao, 2007). The high levels of control

aversion exhibited by SMEs owner/managers in China might also lead to a greater reliance of SMEs on internal and informal sources of financing than is the case in mature economies. Although firms are able to access financing from external sources they do not always do so through the fear of losing control over their own business and subjecting their business activities to greater government scrutiny than would be the case if they did not use external financing.

3.2.4 The ‘Financial Growth’ or ‘Life Cycle’ Model

In recent years a ‘financial growth’ or ‘life cycle’ model has been advanced to explain how the financing needs and capital structure of a firm change as it develops over time (Timmons, 2004). For the purposes of this thesis this is labelled as the life cycle model. Under this model firms in their early stages of development rely overwhelmingly on internal sources of finance with minimal access to external sources of finance. As the firm develops outside investors are able to observe its creditworthiness and reputation over time, resulting in fewer information asymmetries. This improves the ability of the firm to gain access to external debt financing from financial institutions. As a result the debt levels of a firm should tend to increase as it grows in size and age. In the later stages of development a firm’s debt ratios should start to decline as it uses accumulated earnings to finance investment and gains access to external sources of equity financing.

Empirical work generally provides support for the applicability of the life cycle model in explaining the financing decisions of SMEs (Petersen and Schuman, 1987, Fluck et al, 1998). However, recent work by Berger and Udell (1998) suggests that the ‘lifecycle’ model in developed economies might differ considerably from that in developing economies, where external financing has a limited role to play in financing start-ups. They use data from several US datasets to explain how firm financing changes over time. They demonstrate that financing needs and options change as a firm grows in size, gains more experience and becomes more transparent. Compared to the conventional life cycle model their results suggest that the role played by debt financing is greater than expected in the case of younger enterprises.

However, other commentators are less supportive of the ‘life cycle’ model. Gregory et al. (2005) testing the applicability of the Berger and Udell (1998) model to SMEs in the US argue it does not

provide a full story regarding the relationship between firm characteristics and capital structure. They state their findings ‘seem to suggest that the growth cycle of SMEs cannot be collapsed into one universal model, as Berger and Udell (1998) imply.’

The life cycle model might be expected to go some way to explaining the capital structure decisions of private SMEs in China. In a country where SMEs face huge difficulties to access external sources of finance older and larger firms might find it easier to access financing than smaller and younger firms as they develop a track record and as their information is more transparent. Indeed empirical work on data from 628 enterprises in the late 1990s by Gregory et al. (2000) indicates that the life cycle model might provide an adequate explanation for the capital structure of private enterprises in China. The findings of this work reveal that larger and older enterprises in Chinese typically perceive fewer constraints to accessing external sources of finance in their early stages of development than smaller and younger enterprises. This suggests that as firms grow in size and age they should gain better access to external sources of debt and equity financing become less opaque with an established track record.

3.3 Alternative Theoretical Perspectives on Capital Structure

There is growing debate in the literature as to whether financial theories alone can provide a full explanation of the capital structure adopted by SMEs. Barton and Gordon (1988) argue that the finance paradigm might not fully allow for adequate representation of complex behaviour at the individual firm level. They state that to view the firm as a rational economic unit, as is assumed under the finance paradigm, is an oversimplification. Bell and Vos (2009) also argue that financial theories of capital structure do not provide an adequate explanation for the financing behaviour of SMEs. This results from the fact that such theories presuppose that SMEs predominantly act in such a way as to maximise their financial wealth, and generally desire external financing to support business growth. They doubt whether financial wealth maximisation is the main dominant objective function of SMEs and highlight a number of other factors which influence their financing behaviour.

Although there is general agreement that financial theories have contributed to the understanding of capital structure decision-making they conveniently ignore the role played by firm management in

determining capital structure, especially in the SME context, where owner-managers have greater influence over financing decisions than is the case in larger firms (Norton, 1991; Matthews et al., 1994). A whole host of factors have been shown to impact on financing decisions in SMEs other than those posited by financial theories of capital structure. Management researchers have begun to develop alternative theoretical frameworks based on paradigms as diverse as strategic management, psychology and sociology to explain how financing decisions in SMEs are made (Barton and Matthews, 1989; Matthews et al., 1994; Romano et al., 2000).

In this section a review will be undertaken of theoretical and empirical studies from outside the finance paradigm that contribute to the understanding of the capital structure of SMEs. Specifically, research from the disciplines of strategic management, psychology and sociology will be reviewed to enable identification of antecedent firm and managerial level characteristics that help to explain how capital structure decisions are made.

Firstly, a review will be undertaken of four theoretical studies that seek to forward the understanding of how SMEs are financed. In these studies researchers have developed frameworks to assist in our understanding of how capital structure decisions are made. A review of these frameworks will enable identification of the key determinants of capital structure other than those posited by financial theories.

Barton and Matthews (1989) argue that a corporate strategy perspective might be superior to a traditional finance perspective when seeking to explain the financing decisions of SMEs. They argue that managerial choice, constrained by the availability and costs of funds, might go a long way to explaining the capital structures that firm adopt. On the basis of previous work they develop an overreaching theoretical framework which encompasses a series of factors which influence the capital structure decisions of individual firms. These factors include managerial goals, risk aversion and internal constraints. They put forward five propositions based on dimensions of the strategy paradigm to aid in the understanding of how capital structure decisions are made:

1. The risk-taking propensity of senior management will influence the capital structure of the enterprise
2. Managerial goals will influence the capital structure of the enterprise

3. Senior management of the enterprise will prefer internal sources of funds over external financing
4. The risk-taking propensity of senior management and the financial characteristics of the enterprise will determine the amount of debt lenders are willing to offer
5. The financial characteristics of the enterprise will moderate the ability of senior management to decide on an appropriate capital structure for the enterprise

Matthews et al. (1994) bring together divergent perspectives in the literature to develop a model for understanding capital structure decisions making in private SMEs. They move beyond financial theories of capital structure by combining elements from the literature on decision making and strategic management. They propose that financing decisions are determined by the owner/manager's attitudes towards debt financing as moderated by external environmental conditions. In turn, owner/manager attitudes towards debt financing are influenced by the characteristics of the entrepreneur which include the need of the entrepreneur to maintain control over the business, their experience, their risk propensity, their net wealth and their social norms.

Uzzi (1999) develops and tests a theoretical model which sets out to explain how a firm's network ties are a resource which enables them to gain better access to financing at a lower cost than their competitors. Using a national dataset of small firms in the US, he finds that firms are able to gain better access to bank financing at a more competitive price when their transactions are embedded in social relationships with bank officials.

Romano et al. (2000) reviewing the previous literature, identify numerous factors which influence the financing decisions of SMEs. Using a sample of Australian SMEs they empirically test a model of capital structure combining insights from financial theories of capital structure with those from a broader strategic management perspective. In doing this they examine how firm level characteristics, managerial strategy, psychology and human capital impact on the capital structure family-owned SMEs adopt. Their findings reveal that leverage is positively associated with firm size, family-ownership, business planning and business objectives, and negatively associated with profitability. Their analysis

suggests that firm-level factors as posited by financial theories of capital structure do not explain fully how the financing decisions of SMEs are made.

A review of theoretical work led to the identification of several key determinants of capital structure other than those posited by financial theories. These determinants fall into four main categories: managerial strategy, managerial psychology, managerial human capital and network ties. The following section sets out to explain how such factors might influence the capital structure of SMEs and whether the proposed determinants have received empirical support in the literature.

3.3.1 Managerial strategy

Barton and Gordon (1987) argue that the business objectives of owner/managers are a main determinant of a firm's financing decisions. As SMEs have comparatively fewer shareholders the individual goals of owner/managers should have a greater influence over capital structure decision-making than in larger firms (Barton and Matthews, 1989; Romano et al., 2000). Growth intentions and profit maximisation are two of the managerial objectives that have gained the most attention in the literature as regards their relationship with capital structure. Berggren et al. (2000) argue that decision-makers whose principal aim is business growth will tend to be less control averse and more active in seeking external sources of finance when internally generated funds are inadequate. Cassar (2004) argues that SMEs who perceive a need for outside capital in the future will place greater emphasis on building good bank-firm relationships as early as possible to benefit from greater access to finance. Despite a strong theoretical basis for a positive association between growth intentions and leverage the results of empirical studies provide conflicting evidence in support of such a relationship. Several studies demonstrate a positive link between growth intentions of the SME owner/manager or the firm's growth opportunities, and the amount of debt in their capital structure (Cressy, 1995; Michaelas et al., 1999) whilst other studies find conflicting evidence (Chittenden et al., 1996; Jordan et al., 1998; Cassar, 2004).

Although a great deal of work has been conducted on the influence of growth intentions on financing behaviour there has been limited examination as to whether other business objectives affect the capital structure adopted by SMEs. Such objectives may include profit maximisation intentions and intentions

to maximise the long-term value of the business. In China, where most businesses are family-owned or controlled by a small number of individuals, it might be expected that the business objectives of management will influence the financing decisions of SMEs to a greater extent than in the Western world.

3.3.2 Managerial psychology

Barton and Matthews (1989) and Matthews et al. (1994) stress that the risk propensity and control aversion of decision makers may be important determinants of capital structure in SMEs. Analysis of interview data on small firms in the US by Barton (1989) confirms such assertions. He establishes that the beliefs and attitudes of owner/managers as regards debt financing, in particular their desire for control and risk aversion, impact on the financing decisions they make.

As regards the impact of the attitude of management towards risk, Matthews et al. (1994) argue that as capital structure is a major source of financial risk for any enterprise the risk propensity of decision makers will influence the amount of debt they are willing to take on board. Barton and Matthews (1989) stress that 'the amount of risk top managers are comfortable with is likely to have a large bearing on the debt position of the firm' (Barton and Matthews, 1989: 4). They highlight that the risk propensity of management will be extremely important in cases where the owner/manager provides security for the loan in the form of personal assets. Despite such theoretical assertions there has been limited empirical work investigating the relationship between risk propensity and capital structure.

As regards the impact of the control aversion of decision makers on the financing decisions of SMEs, the previous literature suggests that the use of debt may be strongly related to the perceived risk of losing control (Matthews et al., 1994). Berggren et al. (2000) argue that most owner/managers tend not to be interested in seeking external sources of finance, especially those that would entail a change in ownership or greater scrutiny of financial information. Barton and Matthews (1989) stress that owner/managers of private firms typically prefer to finance from internal sources through a fear that they may lose control and flexibility in decision-making to external stakeholders such as banks and venture capitalists. Cressy (1995, 292) suggests that the control aversion of SME owner/manager influences their financing decisions, arguing that the desire of entrepreneurs to maintain independence

'is manifested in their behaviour towards banks and borrowing generally'. He suggests that the limited use of external financing is as much to do with the unwillingness of the owner/manager to consider external financing, than the unwillingness of banks to lend to small businesses. Previous empirical work confirms such assertions, indicating that SME owner/managers tend to be control averse, preferring to utilise internal sources of finance through a fear that external sources of finance will lead to a loss of control over the firm and limit the ability of the owner/manager to make decisions independently (Harvey and Evans, 1995; Hutchinson, 1995; Berger and Udell, 1998). In China the aversion of owner/managers to outside control is one of the main reasons why SMEs tend to prefer sources of finance which require less scrutiny, such as those from social and familial networks, rather than seeking external financing for their business (Pukthuanthong and Walker, 2007).

3.3.3 Managerial human capital

This study defines human capital as the knowledge and skills possessed by the owner/managers of SMEs (Hatch and Dyer, 2004). Previous studies demonstrate that the human capital of owner/managers may be a significant determinant of how SMEs are financed (Bates, 1990; Cassar, 2004; Zhang, 2008). In these studies general human capital has been measured using three proxies; the age, managerial experience and the educational background of the owner/manager (Scherr et al., 1993; Romano et al., 2000; Cassar, 2004).

Human capital may influence the capital structure of SMEs in a number of ways. Lenders may consider the human capital of owner/managers when deciding whether or not to lend to SMEs. The experience and educational achievements of the owner/manager may provide lenders with a signal as to the quality of the enterprises' human capital, and thus improve access to external financing (Storey, 1994; Bates, 1997; Cassar, 2004). The human capital of the owner/manager might also affect their preferences for risk and control, and therefore influence the amount of debt they are willing to borrow.

Previous empirical work investigating the influence of human capital of owner/managers on the capital structure of SMEs produces mixed findings. Some studies indicate that human capital is positively related to the use of debt in SMEs (Bates, 1990; Zhang, 2008) whilst others find no or a negative relationship (Scherr et al., 1993; Romano et al., 2000; Cassar, 2004). Scherr et al. (1993) find a

negative and statistically significant relationship between the age, managerial experience and the education level of the owner/manager and use of debt in the capital structures of SMEs, contrary to what they hypothesised. They suggest this may be a result of a number of factors: the reluctance of financiers to lend to older people because of their shorter expected time of ownership, the fact that older, experienced and more educated owner/managers are more risk averse than younger and less educated ones, and the fact that older, experienced and more educated owner/managers are wealthier and use more of their personal finance to finance their business operations than younger, less experienced and less educated managers. They also find a positive relationship between the owner/manager's ownership experience and use of external debt. Van der Wijst (1989) produces similar findings. He establishes that SMEs controlled by older owner/managers are less reliant on debt than those controlled by younger owner/managers. Both Cassar (2004) and Romano et al. (2000) find limited evidence of a significant relationship between the human capital of the owner/manager and leverage. Cassar argues although older, more educated owner/managers might find it easier to access debt they might not do so because of their tendency to be more control and risk averse. In contrast to the findings of other empirical work, Bates (1990) and Coleman and Cohn (2000) find that enterprises run by owner/managers with higher educational qualifications have higher levels of external financing in their capital structure than those with fewer qualifications.

Limited work has looked at the influence of the human capital of owner/managers on SME financing in the Chinese context. The findings of recent work by Zhang (2008) seem to indicate that human capital is a significant determinant of firm access to formal financing mechanisms. He establishes that firms run by owner/managers with business experience prior to setting up their own business and a higher education, were more likely to rely on formal financing mechanisms than those who had not. This suggests that human capital of owner/managers might be an important factor in determining the ability of SMEs to access to external sources of financing.

3.3.4 Network ties

The network ties that SMEs form have been shown to influence the financing of their business activities in several studies outside of China (Uzzi, 1999; Nguyen and Ramachandran, 2006; Le and Nguyen, 2009). In this study the role played by networks in SME financing is investigated. This study

follows Wu and Leung (2005), by defining network ties the totality of a firm's social relationships with other businesses, government officials and financial institutions.

In China social relationships, known as *guanxi*, play a critically important role in Chinese culture, permeating all levels of business activity (Yeung and Tung, 1996; Tsang, 1998; Peng and Luo, 2000; Fan, 2002). Such relationships between economic actors are built on mutual trust, and bind the exchange partners through the exchange of favours and obligations (Zou and Gao, 2007). A number of theories have been forwarded to explain why the phenomenon of *guanxi* is so pervasive in Chinese business and society. One group of researchers view it as a cultural phenomenon, tracing its roots back to Confucianism (Carlisle and Flynn, 2005; Langenburg, 2007). They highlight the importance placed by Confucianism on personal relationships and the ethics of reciprocity, suggesting that the prevalence of the *guanxi* system today results from deep rooted historical influences (So and Walker, 2006; Standifird and Marshall, 2000). This viewpoint has been criticised in the literature by commentators who suggest that Confucianism influence on Chinese culture has weakened due to political and social events and the influence of outside culture (So and Walker, 2006; Langenburg, 2007). Langenburg (2007) argues that cultural explanations require Confucian phenomenon to be reinterpreted to fit the nature of contemporary Chinese society. So and Walker (2006) point to the ambiguous nature of the link between culture and *guanxi*. They argue that culture is one but not the sole factor for the prevalence of *guanxi* behaviour in China and conclude that researchers should work to incorporate the role of culture into a more general economic framework to explain the existence of *guanxi*. Guthrie (1998) suggests that the importance of *guanxi* is more dependent on the institutional structure of Chinese society rather than its culture.

Another group of researchers explain the prevalence of *guanxi* in Chinese business culture as being due to a relatively weak and underdeveloped legal and regulatory environment in China (Alston, 1989; Nee, 1992; Xin and Pearce, 1996; Park and Luo, 2001; Luo, 2003; Ahlstrom and Bruton, 2006; So and Walker, 2006). They argue that building strong network ties enables firms to overcome significant institutional barriers and protect themselves against regulatory changes by the state. Redding (1990) observes that social networks in China play an important role in the regulation of transactions where no formal state institutions exist for that purpose. Nee (1992) points out that the Chinese economy is

characterised by weak capital market structures, limited protection of property rights and a lack of coherent business laws, which make doing business uncertain and costly. He argues that under these circumstances it is essential for private SMEs, who have less institutional support than state-owned or collective firms to build close relationships with other economic actors in order to survive. Xin and Pearce (1996) demonstrate that managers of collective and private firms work hard to build and maintain relationships with other economic actors to compensate for a lack of formal institutional support in China, i.e. a reliable government and functioning legal system. Le and Nguyen (2009) argue that in emerging economies, which are characterised by a lack of effective market institutions, private firms tend to rely on networks with other economic actors to access information, business opportunities and seek resources. In China, SMEs have strong incentives to cultivate network ties with other economic actors. Good relationships with government departments enable firms to get access to useful resources such as information on regulatory changes, business licenses and access to restricted markets (Fan, 2002). They can also be used to solicit favours from government officials who have control over scarce resources (Tsang, 1999). Likewise good relationships with other firms allow SMEs to gain access to resources such as management know-how and new technology.

According to the resource-based view of the firm, the resources that emanate from a firm's network ties may provide it with a sustained competitive advantage over its competitors if they are valuable, rare and not capable of being imitated (Barney, 1991). The resources inherent in social relationships with other organizations have been shown to be a major factor that allow SMEs to prosper despite limited financial and human capital (Sirmon and Hitt, 2003; Deakins et al., 2007). A great deal of theoretical and empirical work has examined the importance of network ties to organizational performance, especially in the context of transitional economies such as China (Peng and Luo, 2000; Park and Luo, 2001; Luo, 2003; Wu and Leung, 2005; Gu et al., 2008). This overwhelmingly provides strong support for a positive relationship between the strength of the network ties possessed by a firm and its organizational performance. A series of studies by Luo and his associates demonstrate that a firm's network ties with government officials and executives at other firms impact significantly on its organizational performance (Peng and Luo, 2000; Park and Luo, 2001; Luo, 2003). In line with these studies Gu et al. (2008) find direct effects of a firm's network ties on market performance as well as indirect effects mediated through its channel capability and responsive capability. As of present Wu

and Leung (2005) is the only study to examine the impact of network ties on the organizational performance of Chinese SMEs. They find limited evidence that the network ties SMEs have with business partners, banks and government officials, impact positively on their performance.

A small but growing amount of work has been conducted as to the role played by network ties in SME financing in the context of emerging economies (Nyugen and Ramachandran, 2006; Zhang, 2008; Le and Nguyen, 2009). These ties may include relationships with other economic actors including government officials, customers, suppliers and financiers. One might expect that Chinese SMEs with stronger network ties will find it easier to access external financing and therefore have higher levels of debt in their capital structures for several reasons.

Network ties with government officials may improve SME access to financing from the banking sector. This is due to the fact that the state-owned banks, who account for over half of the private lending in China, are still subject to significant state influence (Farrell et al., 2006; Brandt and Zhu, 2007; Hsu, 2009). The traditional linkages between the government and the state-owned banks suggest that building network ties with government officials should improve SME access to bank loans. Recent work on larger firms in China and other emerging economies reveals that SMEs with strong network ties with government find it easier to access bank financing (Khwaja and Mian, 2005; Li et al., 2005; Bai et al., 2006; Le and Nguyen, 2009). Khwaja and Mian (2005) find that the network ties of Pakistani firms with government officials enables them to obtain preferential access to loans from state-owned banks. They do this from using their political connections to threaten bank officials with removal or transfer, or reward them with appointments and promotion. Previous studies also demonstrate that Chinese firms with greater political connections find it easier to access finance from the banking sector (Li et al., 2005; Bai et al., 2006). Firms whose owner/managers were members of the Communist Party were found to have greater access to bank financing than those who were not. This suggests that despite three decades of opening-up and reform, officials at various levels of the government still have some power to determine the allocation of credit (Carlisle and Flynn, 2005). Le and Nguyen (2009) also find that developing network ties with government officials promotes the use of bank loans for Vietnamese firms. In recent years empirical work has begun to examine the influence of official networks on SME financing in China (Zhang, 2008). Zhang (2008) finds that entrepreneurs in Chengdu

City in Sichuan Province with greater political connections are more likely to rely on formal methods of financing.

Network ties with suppliers and customers may enable SMEs to improve access to financing. These networks help spread knowledge about the firm informally, providing information about a firm's reliability and creditworthiness to other suppliers and providers of credit, thus improving its reputation within business circles (Granovetter, 1985; Coleman, 1988). Network ties with other firms are especially important when firms apply for bank loans. Due to a lack of publicly-available data on SMEs financiers often rely on their informal contacts with executives at other firms to assess the creditworthiness of loan applicants and the feasibility of their business proposals (Nguyen et al., 2006). Endorsements from other firms assist in creating a positive image of the firm, increasing the likelihood that they will be granted credit. Network ties with managers at other firms may also benefit SMEs in accessing alternative sources of capital, which may include trade credit from their customers or suppliers. This is especially true for firms operating in emerging economies who face significant constraints in accessing bank finance (Le and Nguyen, 2009). These sources of capital are typically more convenient, accessible and in many cases cheaper than bank financing. Recent empirical work in Vietnam, an emerging economy like China, reveals that SMEs with stronger network ties with managers at other firms have greater debt in their capital structure than those with weaker ties (Nyugen and Ramachandran, 2006). Recent work by Le and Nguyen (2009) demonstrates that networking with customers promotes the use of bank loans in Vietnamese SMEs.

Network ties with financiers should provide potential financiers with greater information on the financial and operating situation of the enterprise, thus reducing asymmetric information between the two parties (Le and Nguyen, 2009). Uzzi (1999) finds a strong relationship between the social ties that senior managers of US SMEs had with bank officials and the ability of firms to access adequate external financing at lower cost. A recent study conducted in Vietnam also indicates that building close social relationships with financiers enables SMEs to get preferential access to credit (Nyugen and Ramachandran, 2006). Its findings demonstrate that firms with strong business and social relationships with bank officials tend to employ more debt, especially short-term debt in their capital structure.

Despite a growing amount of work on the role played by network ties on the financing behaviour of firms in China and other emerging economies, limited work has examined how network ties might influence the capital structure of Chinese SMEs.

3.4 Proposed Methodology

Whilst previous empirical work on capital structure has predominantly relied on quantitative analysis of secondary data (Chen, 2004; Tong and Green, 2005; Van Gennip, 2005; Klapper et al., 2006; Huang and Song, 2006; Abor and Biekpe, 2007), this study uses a sequential mixed methods approach i.e. the results from one method are analysed before proceeding with another method (Gilbert, 2008).

Firstly, in Chapter 4 secondary analysis of firm-level data are undertaken to investigate determinants of capital structure as posited by financial theories of capital structure. Following this, in Chapter 5 semi-structured interviews are used to explain the quantitative findings from the previous chapter, and gain additional insight into other factors that may impact on the capital structure that private SMEs adopt. The interview questions are developed with reference to the previous literature and the findings from quantitative analysis of firm level data. Finally, in Chapter 6 a theoretical model is developed. This model seeks to ascertain the extent to which other factors as highlighted in the findings, other than those advanced by financial theories of capital structure, influence how financing decisions in Chinese SMEs are made. Specifically how managerial strategy, psychology, human capital and network ties impact on the financing choices of SMEs are examined. The model is then tested through the distribution and subsequent analysis of self-completion survey questionnaires.

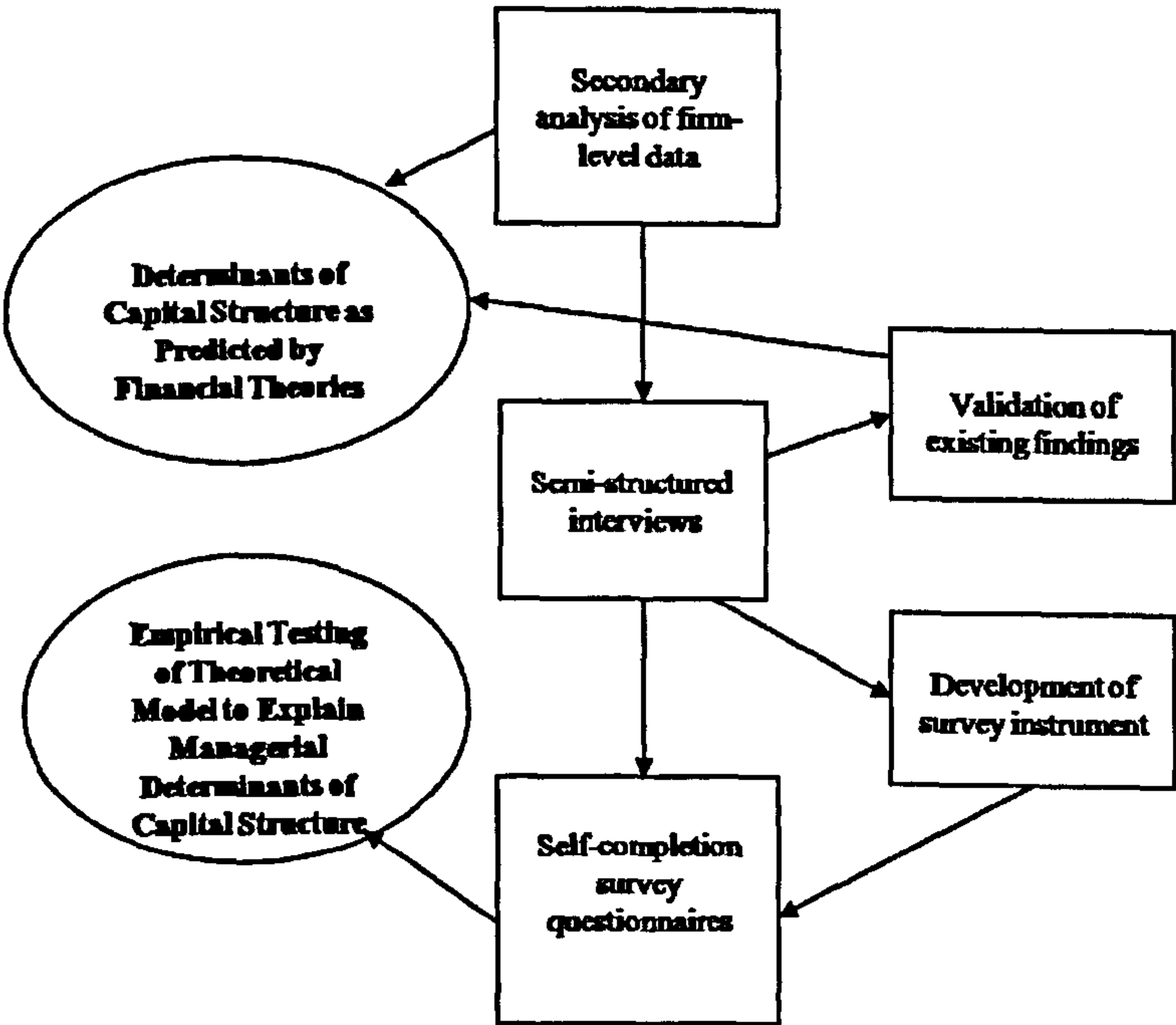
A mixed methods approach was chosen as it should increase the likelihood that research generates more accurate results than is the case if a single method had been adopted. Mixed methods have been shown to increase the reliability of research findings and the level of confidence in them, through triangulation (Alexander et al., 2008). Triangulation is defined by Denzin (1978, 291) as ‘a combination of methodologies in the study of the same phenomenon’. It refers to the intentional use of two or more methods to strengthen the validity of results when investigating a given phenomenon (Greene, 2007). As a result, mixed methods should provide a more accurate picture of the phenomena being investigated. As regards the present study semi-structured interviews will be used in Chapter 5 to

gain further insight into, and strengthen the validity of, the findings from the secondary analysis of firm-level data in Chapter 4.

A mixed-methods approach also assists in the development of accurate research instruments (Alexander et al., 2008). In this study semi-structured interviews will be used to help inform the development of a theoretical model examining how managerial strategy, psychology, human capital and network ties impact on the financing of SMEs. The model will subsequently be tested through the distribution of a self-completion survey questionnaire based on the research findings from interview data and the existing literature. Interview data will allow a greater insight to be gained into the factors that may impact on financing decisions, and allow for the development of a more thorough model than would be the case if the model was developed solely through reliance on the existing body of literature. Mixed methods have been used in numerous studies for development purposes where the first method is used to help inform the development of the second method (Greene et al., 1989). Multi-methods will ensure that time is not wasted in asking irrelevant questions in the self-completion survey questionnaire (Saunders et al, 2003).

The research design of the study can be seen in Figure 3.3.

Figure 3.3: Research design



3.5 Conclusion

A large number of factors have been identified in the extant literature that influence the financing decisions of SMEs based on financial theories of capital structure. However, there is no consensus in the literature as to whether such theories adequately explain the capital structures adopted by firms in the context of developing economies. This chapter reviewed the existing body of theoretical and empirical work on capital structure. Firstly, financial theories that set out to explain capital structure decisions were introduced. These theories include the static trade-off theory, pecking-order theory and lifecycle model of capital structure. Next the limited applicability of such theories to the SME context was examined through a review of previous empirical work in both mature and developing economies. Following this a number of alternative theoretical perspectives that might assist in explaining the capital structure of SMEs, especially those in the developing economy context, were presented. Finally the methodological approach to be adopted in this research study was introduced.

In the following chapter the extent to which financial theories of capital structure fully explain the capital structure adopted by SMEs in China will be investigated using an unbalanced sample of 1539 firms in the years 2004-2005.

CHAPTER 4: CAPITAL STRUCTURE OF CHINESE SMES: EVIDENCE FROM FIRM-LEVEL DATA

4.1 Introduction

Since the Chinese government began to recognise and encourage the development of private enterprises in 1987 there has been a steady growth in the number of private SMEs. Their contribution to China's phenomenal growth over the past two decades is well documented in the literature (Dougherty and Herd, 2005; Chen, 2006). By the end of 2005 there were 42 million SMEs in China, with an annual growth rate of 15-20 per cent (Fung et al., 2007). They have been shown to make important contributions to employment, innovation and productivity improvements (Garnaut et al., 2001; Yang, 2004; Dougherty and Herd, 2005). The success of Chinese private SMEs comes despite the presumption that their growth might be constrained due to limited access to external finance. On the face of it this would seem not to have been the case. So do the factors observable in empirical reality elsewhere impinge on the capital structure of Chinese SMEs, i.e. how significant are the factors normally considered to affect capital structure: firm size, age, profitability and asset structure?

In recent years researchers have begun to examine such determinants of capital structure in SMEs. Empirical studies have been conducted in economies with developed banking systems such as Australia (Cassar and Holmes, 2003; Johnsen and McMahon, 2005), Ireland (Bhaird and Lucey, 2009), Spain (Sorgorb-Mira, 2005), Sweden (Cressy and Olofsson, 1997) and the UK (Jordan et al., 1998; Michaelas et al., 1999; Hall et al., 2000). Only a small number of studies have been conducted in developing economies where the banking sector is thinner (Klapper et al., 2006; Nguyen and Ramachandran, 2006; Abor and Biekpe, 2007). These studies unsurprisingly produce conflicting results, so a study on China, may yield results to help explain why such differences might exist.

Research has already been conducted on the capital structure of large Chinese firms, predominantly on listed firms on the Shanghai and Shenzhen Stock Exchanges (Chen, 2004; Chen and Strange, 2005; Tong and Green, 2005; Huang and Song, 2006; Bhabra et al., 2008, Qian et al., 2009) and on large non-listed manufacturing enterprises (Li et al., 2009). Focusing on a panel of 77 Chinese PLCs over the period 1994-2000, Chen (2004) finds that the traditional capital structure theories developed in western

economies do not hold in the Chinese context. Huang and Song (2006) use a panel of 1200 PLCs over the period 1994-2003 and show that leverage increases with firm size, fixed assets, volatility, and non-debt tax shields, and decrease with profitability. Bhabra et al. (2008) find that over the period 1992-2001, Chinese listed firms use little long-term debt, which is positively related to firm size and tangibility, and negatively associated with profitability and growth. Using a more recent dataset made up of 650 PLCs over the period 1999-2004, Qian et al. (2009) show that leverage is positively associated with firm size and tangibility, but negatively related to profitability, non-debt tax shields, volatility, and growth. Finally, Li et al. (2009) use a panel made up of 417,068 firm-year observations over the period 2000-2004 to show that ownership and governance structures play an important role on firms' financing decisions. Despite the theoretical and empirical contributions made by these studies they fail to raise the question as to what factors influence the capital structure of Chinese SMEs.

In this chapter a dataset containing financial information on 1539 enterprises is utilised to examine the capital structure determinants of Chinese SMEs. Two main research questions are addressed:

- What factors determine the capital structure of Chinese SMEs?
- Do existing financial theories of capital structure hold true in the Chinese context?

A number of factors found to determine the capital structure of SMEs in other countries, as posited by financial theories of capital structure, are tested to see if they are significant in the Chinese context. These include size, age, asset structure and profitability. The extent to which cultural and institutional differences render such determinants inapplicable in the Chinese context are then discussed.

The structure of this chapter is as follows. Firstly, the background of this research is discussed and the theoretical literature related to the capital structure of SMEs is examined. Following this hypotheses are developed based on the existing literature. Next the methodology of this research is outlined in detail, examining how the firm-level dataset was obtained, the dependent and independent variables utilized in the study and the econometric techniques applied to the dataset. The empirical results are then presented and the implications of the research findings discussed. Finally, the limitations of this chapter are discussed, suggestions for future research presented and conclusions made.

4.2 Theoretical Background

In this chapter the applicability of existing financial theories of capital structure to the Chinese SME sector are examined. As highlighted in the previous chapter these include the static trade-off theory (Kraus and Litzenberger, 1973; Kim, 1978), the pecking-order theory (Myers, 1984) and the financial life-cycle model (Berger and Udell, 1998; Timmons, 2004).

Existing studies identify a number of determinants of capital structure based on these competing theoretical explanations. These determinants are set out in Table 4.1.

Table 4.1: Predicted determinants of capital structure from different theoretical perspectives

Variable	Static Trade-Off Theory	Pecking-Order Theory	Life Cycle Model
Size	+	+	+
Age			+
Asset Structure	+	+	
Profitability	+	-	
Incorporation			

Under the static trade-off theory leverage would be expected to be positively related to the size of the firm (lower bankruptcy costs), the profitability of the firm (more profits that need to be shielded from taxation and lower costs of financial distress) and the asset structure of the firm (lower bankruptcy costs). As highlighted in the previous chapter support for all of the predicted determinants of capital structure as forwarded by the static-trade off theory is not expected due to the inability of SMEs to trade-off between debt and equity due to difficulties faced in accessing the formal capital markets.

Under the pecking order theory leverage would be expected to be positively related to the size of the firm (lower asymmetric information), negatively related to the profitability of the firm (more profitable firms have more internal financing available), and positively related to the asset structure of the firm (firms with a greater percentage of fixed assets would be more able to access collateralized debt). As highlighted in the previous chapter it is suspected that the difficulties faced by SMEs in accessing adequate sources of external financing, and the aversion of entrepreneurs to seeking external sources of finance might render the pecking-order theory inapplicable to Chinese SMEs.

Under the life-cycle model leverage would be expected to be positively related to the size of the firm and the age of the firm. Based on the evidence from previous empirical work in China it is suspected that the life-cycle model might provide a reasonable explanation for the capital structures adopted by private enterprises in China (Gregory et al., 2000).

In the following section testable hypotheses are developed to examine the firm-level determinants of Chinese SMEs by drawing on existing theoretical and empirical work.

4.3 Hypotheses Development

4.3.1 Firm size

Theoretical studies provide a number of theoretical reasons why firm size may be related to the capital structure of the firm (Cassar, 2004). Firstly, smaller firms may find it more costly to resolve information asymmetries with potential lenders, resulting in limited access to financing or financing at a higher cost. Asymmetric information problems tend to be more acute in SMEs than in large enterprises due to their opaque nature (Berger and Udell, 1995). As a result monitoring costs for lenders are higher for SMEs than in large enterprises.

SMEs also face greater transaction charges and interest rate charges than large firms as a result of their inability to benefit from economies of scale in financing (Mukherjee, 1992; Cassar, 2004). Hall et al. (2000) argue that the existence of fixed transaction costs make financing more expensive for smaller enterprises. In addition, high charges incurred in the registration of assets as collateral and loan application charges put bank financing outside the available choices of many SMEs.

Compared to larger enterprises, SMEs face greater operating risks, which result in greater difficulty in accessing external financing (Ortqvist et al., 2006). Large enterprises with diversified revenue streams and established operations tend to fail less often than SMEs, which are more vulnerable to bankruptcy than large firms. Empirical studies show a negative relationship between firm size and operating risk (Titman and Wessels, 1988; Castanias, 1983; Cosh and Hughes, 1994). Large firms are also able to get

better access to other channels of financing such as trade credit and informal loans than SMEs. They tend to have greater bargaining power with trade creditors and informal financiers.

Existing empirical work provides good support for these theoretical perspectives in developed economies (Romano et al., 2000; Cassar, 2004; Sorgorb-Mira, 2005). However, a number of studies, while finding a positive relationship between firm size and financial leverage in the long-term, find a significantly negative relationship in the short-term (Chittenden, Hall, & Hutchinson, 1996; Michaelas et al., 1999; Hall et al., 2000). Research conducted on SMEs in developing countries and larger enterprises in China tend to confirm a positive relationship between firm size and all measures of capital structure (Huang and Song, 2006; Klapper et al., 2006; Li et al., 2009; Nguyen and Ramachandran, 2006; Abor and Biekpe, 2007).

Although the empirical evidence on SME financing in developed economies points towards a positive relationship between firm size and both total and long-term leverage, and a negative relationship between firm size and short-term leverage, the situation should be different for Chinese SMEs. In the context of developing economies empirical work has confirmed a positive association between firm size and both short and long-term leverage. Information asymmetries between enterprises and lenders tend to be severe in developing economies such as China, meaning even large firms rely extensively on short-term financing and have greater trouble accessing external financing than is the case in developed economies. Therefore a positive relationship between firm size and all measures of capital structure for Chinese SMEs is predicted leading to the following hypotheses:

Hypothesis 1a. Firm size is positively related to total leverage.

Hypothesis 1b. Firm size is positively related to short-term leverage.

Hypothesis 1c. Firm size is positively related to long-term leverage.

4.3.2 Firm age

Theoretical studies provide a number of reasons why firm age may be related to the capital structure of the firm. Proponents of the life-cycle model of capital structure argue that as a result of information asymmetries between the firm and potential lenders in the early stages of development firms will rely

overwhelmingly on internal sources of finance, finding it difficult to access external sources of financing (Berger and Udell, 1995). Firm age can be viewed as a proxy for risk and reputation, inferring that age is negatively related to risk and positively related to reputation (Ortqvist et al., 2006). As firms mature they will find it easier to access debt financing as asymmetric information problems with lenders are resolved through improvements in the firm's private and public reputation (Berger and Udell, 1995). Petersen and Rajan (1994) argue that long term lending relationships lead to a reduction in information asymmetries as banks are informed about the borrower's credit history and the financing behaviour of the firm. However, other commentators propose a negative relationship between firm age and leverage. Johnson and McMahon (2005) suggest that younger firms will have higher leverage in the early stages of development before becoming more self-sufficient through reinvestment of profits.

Theoretically there is support for a positive relationship between the age of a firm and leverage although results of empirical studies are inconclusive. Empirical studies conducted on SMEs in developed economies on the relationship between firm age and capital structure produce conflicting results. Hall et al. (2000) find evidence of a negative relationship between the age of a firm and both short and long-term leverage. Johnson and McMahon (2005) study provide evidence of a negative relationship between firm age and short-term leverage and firm age and long term leverage. Romano et al. (2000) do not find the age of the firm to be a significant predictor of total leverage.

In the developing economy context Abor and Biekpe (2007) find evidence of a strong positive relationship between firm age and access to bank financing in Ghanaian enterprises. Their results suggest that older SMEs tend to have good track records and better relationships with their lenders than younger enterprises. A study of Polish enterprises by Klapper et al. (2006) produces conflicting evidence by demonstrating a negative relationship between firm age and both short-term and long-term leverage.

In the Chinese context a number of studies have examined the relationship between firm age and leverage. Li et al. (2009) confirm a positive relationship between firm age and leverage. Gregory et al. (2000) demonstrate that as the age of a firm increases its access to external sources of finance improves. It is hypothesised that there will be a positive relationship between firm age and leverage for Chinese

SMEs for the following reasons. Firstly, entrepreneurs who have been running their business for a long period of time are more likely to have good connections with politicians, bank officials and other firms enabling them to get better access to credit. Secondly, older firms are more likely to have an established track record that will enable them to better access external sources of finance than firms without a track record. Based on a review of the existing theoretical and empirical evidence the following hypotheses are advanced:

Hypothesis 2a. Firm age is positively related to total leverage.

Hypothesis 2b. Firm age is positively related short-term leverage.

Hypothesis 2c. Firm age is positively related to long-term leverage.

4.3.3 Asset structure

The ability to obtain bank financing depends on the availability of collateral in the form of physical assets. These provide a means to resolve issues that arise from information asymmetries between lender and borrower and limit the need for any detailed monitoring of the loan contract (Berger and Udell, 1998; Storey, 1994). Where information asymmetry exists, the giving of collateral provides reassurance, plugging any gaps in confidence that inevitably exist between borrowers and formal lenders like banks (Stiglitz and Weiss, 1981; Chan and Kanatas, 1985; Hanley and Crook, 2005).

Given the high levels of asymmetric information between the firm and lender in the start-up and growth phase, the firm's asset structure should have a significant impact on a firm capital structure in the early stages of development (Cassar, 2004). Collateral also acts as a risk reduction mechanism by limiting the financial losses that the lender may incur if the borrower defaults on the loan contract.

Empirical studies on SMEs in developed countries generally provide support for a positive relationship between asset structure and long-term leverage and a negative relationship between asset structure and short-term leverage (Chittenden et al., 1996; Hall et al., 2000; Cassar and Holmes, 2003; Sorgorb-Mira, 2005; Ortqvist et al., 2006). This results from the fact that in the short-term enterprises use sources of financing which do not require fixed assets as collateral, such as trade credit and bank overdrafts, whereas in the long-term financing is secured against fixed assets.

In developing economies Nguyen and Ramachandran (2006) find evidence of a negative relationship between asset structure and leverage for Vietnamese SMEs, the overwhelming proportion of which was short-term. Klapper et al. (2006) find evidence of a positive relationship between asset structure and long-term leverage, and a negative relationship between asset structure and short-term leverage.

In the Chinese context the existing results conflict. Huang and Song (2006) in their study of listed companies find a significantly positive relationship between asset structure and leverage. Li et al. (2009) provide conflicting evidence which suggests a negative relationship between a firm's asset structure and leverage.

On balance, it might be expected that the Chinese SMEs would produce results similar to those found for SMEs in less developed countries where access to formal bank financing is limited and the proportion of short-term debt in relation to long-term debt is extremely high (Klapper et al., 2006; Nguyen and Ramachandran, 2006). This leads to the following hypotheses:

Hypothesis 3a. Asset structure is negatively related to total leverage

Hypothesis 3b. Asset structure is negatively related to short-term leverage

Hypothesis 3c. Asset structure is positively related to long-term leverage

4.3.4 Profitability

Theoretically there is support for a negative relationship between profitability and firm leverage. According to the pecking order theory highly profitable firms will tend to finance investment through retained earnings first and raise external financing only when it is essential (Myers, 1984). This suggests the more profitable the firm is, the greater its retained earnings will be, and the less need it has to borrow in both the short and long term. Other commentators argue the opposite, suggesting that profitable firms being more attractive to financial institutions are more likely to attract more external debt capital especially in markets when credit rationing is present (Ooi, 1999).

The majority of empirical studies on the capital structure of SMEs in developed countries find evidence

of a negative relationship between profitability and both short-term and long-term leverage (Van der Wijst and Thurik, 1993; Chittenden et al., 1996; Jordan et al., 1998; Michaelas et al., 1999; Cassar and Holmes, 2003; Sorgorb-Mira, 2005).

In the developing economy context there is conflicting evidence about the relationship between the profitability of the firm and its capital structure. Abor and Biekpe (2007) find evidence of a negative relationship between profitability and bank financing in the case of Ghanaian SMEs. Klapper et al. (2006) confirm a negative relationship between firm profitability and both short-term and long-term leverage. In contrast, Nguyen and Ramachandran (2006) do not find strong evidence of a positive link between profitability and leverage in Vietnamese SMEs. The authors attempt to explain the insignificance of profitability as a determinant of capital structure by noting that the financial statements of most Vietnamese SMEs are not audited and therefore unreliable. As a result they suggest that the financial statements of many Vietnamese SMEs might not reflect their true profitability of the firm. Studies on the capital structure of larger Chinese enterprises overwhelmingly confirm a negative relationship between profitability and capital structure (Chen and Strange, 2005, Tong and Green, 2005; Huang and Song, 2006; Li et al; 2006; Bhabra et al., 2008). This leads to the following hypotheses:

Hypothesis 4a. Profitability is negatively related to total leverage.

Hypothesis 4b. Profitability is negatively related to short-term leverage.

Hypothesis 4c. Profitability is negatively related to long-term leverage.

4.3.5 Incorporation

Theoretically, there is limited support for the proposition that incorporation would lead to greater availability of external sources of financing for firms. Cassar (2004) suggests that potential lenders may perceive incorporation as a signal of credibility and formality and represent the enterprise's future growth potential.

Limited empirical research has been undertaken on incorporation as a determinant of the capital structure of SMEs. Storey (1994) demonstrates that firms with limited liability are more likely to be bank financed than non-incorporated sole traders or partnerships. Cassar (2004) finds evidence to

suggest that limited liability firms have greater access to bank finance than non-incorporated firms but no evidence of a relationship between incorporation and total leverage. Coleman and Cohn (2000) find evidence of a positive relationship between incorporation and total leverage but no relationship between incorporation and access to bank finance. As of present there has been limited examination of the impact of incorporation on capital structure in the context of SMEs in developing economies. However, it might be expected that incorporation will lead to greater access to debt financing due to the greater transparency requirements placed on limited liability firms in China, which should lead to fewer information asymmetries between enterprises and their lenders. This leads to the following hypotheses:

Hypothesis 5a. Incorporation is positively related to total leverage.

Hypothesis 5b. Incorporation is positively related to short-term leverage.

Hypothesis 5c. Incorporation is positively related to long-term leverage.

4.4 Methodology

4.4.1 Choice of methods

In order to investigate the firm-level determinants of capital structure as posited by financial theories of capital structure secondary analysis of firm-level data obtained from local government authorities was conducted. Datasets collected by government organizations and private industry bodies have been commonly used in previous studies into the capital structure determinants of SMEs in both developed and developing economies (Cassar and Holmes, 2003; Cassar, 2004; Sorgorb-Mira, 2005). They provide rich sources of data for secondary analysis (Allum and Arber, 2008). Secondary data was chosen as the costs involved in gaining access to it are much less than the costs of collecting the information individually (Saunders et al., 2003). The local government authorities in China are the only organizations with access to firm-level financial data of SMEs. It was impossible to collect financial information of the requisite quality and quantity from individual enterprises or industry groups alone, due to the unwillingness of enterprises to disclose information to private outsiders and the sheer cost of collecting information on such a large sample of firms. As a result the best option was to gain access to the financial data possessed by local government authorities.

4.4.2 Sample and data collection

The dataset used in this chapter was obtained from the statistics office of the Zhejiang Provincial Government. It was collected under the Accounting System for Small Business Enterprises (ASSBE) as part of the yearly Annual Report of Industrial Enterprises conducted by provincial statistics bureaus nationwide. The Ministry of Finance introduced the ASSBE in 2004, which brought the accounting regulations for SMEs into greater conformity with International Financial Reporting Standards (Lehman Brown, 2004). Although unincorporated firms are not legally obliged to follow the ASSBE, all firms sampled under the Annual Report of Industrial Enterprises are required to file their financial reports in accordance with these regulations. The ASSBE provides for simplified disclosure requirements compared to those faced by larger firms, who are required to file cash flow statements and a profit and loss appropriation account in addition to an income statement and balance sheet (Chindelity Consultancy, 2005; Lehman et al., 2010). Compared to larger firms tax has a relatively greater influence on the balance sheets of smaller firms under the ASSBE. As a rule, income tax is deducted first before profits can be distributed to owners. There is thus a clear line between capital and revenue transactions.

The definition of an SME in China differs according to industry, and is based on three measures, the number of employees, annual turnover and total assets. Under Chinese law registered enterprises are required to submit their profit and loss accounts and balance sheets with the government statistical bureau at the end of each financial year. Zhejiang Province was one of the first provinces in China to introduce economic reforms aimed at promoting private sector development. As a result it has the highest proportion of private enterprises of any province and makes it an ideal location for this research. Table 4.2 describes the gross industrial output of enterprises in Zhejiang. Over 80 per cent of its gross industrial output is accounted for by private enterprises, while SMEs from 2003 onwards have accounted over 82 per cent of the output. This clearly signals the contribution of not only private enterprises but SMEs as well to the Zhejiang economy.

Table 4.2: Gross industrial output of enterprises in Zhejiang

Gross Industrial Output Total in 100 million yuan	2000	2003	2004	2005
	6603.65	12864.23	18729.06	23106.76
By Ownership:				
- State	1292.72 (19.6%)	1686.99 (13.1%)	2803.43 (15%)	3401.17 (14%)
- Private	5310.93 (80.4%)	11177.24 (86.9%)	15925.63 (85%)	19705.59 (86%)
By Size:				
- Large	1649.88 (25%)	2300.14 (17.88%)	2230.36 (11.91%)	3803.69 (16.5%)
- SMEs	4953.77 (75%)	10564.09 (82.12%)	16498.7 (88.09%)	19303.07 (83.5%)

Data Source: Zhejiang Statistical Yearbook (2007)
Note: Numbers in parentheses represent the figures as a % of the total

The dataset obtained from the Zhejiang SME bureau contained firm-level data for 2000 SMEs from Shaoxing City in Zhejiang Province. The data comprised of financial information from the profit and loss accounts and balance sheets of each firm. Shaoxing is the forth largest city in Zhejiang Province, and borders the provincial capital of Hangzhou. Private sector development in Shaoxing has reached an advanced level, accounting for over 90 per cent of the city’s annual industrial output, which makes it a good setting for research into the financing of private SMEs.

Secondary datasets collected by government departments are generally viewed as being reliable and accurate. Government datasets tend to be generated by experienced researchers who follow rigorous procedures to ensure the quality of the data collected (Bryman, 2008).

However, financial data on SMEs collected by the Chinese government authorities has been criticised by commentators for being unreliable and inaccurate (Gregory et al., 2000). Gregory et al. (2000) suggest that firm-level financial data collected by government departments tends to be inaccurate as a result of enterprises underreporting and misreporting their true financial position to government authorities to avoid excessive taxation and government interference. Despite the criticisms levied at the reliability and accuracy of secondary data in China datasets collected by government are the best

available source of financial data on SMEs. In recent years new accounting standards have been introduced by the government authorities, which has lead to greater transparency and more accurate reporting of financial data by enterprises (Ng et al., 2002).

In order to address the issue of external validity in this research, care was taken to ensure that the dataset roughly corresponded to the whole population of SMEs in Zhejiang province in terms of industrial breakdown. The range of firms in the dataset was checked against province wide data on the industrial breakdown of firms into secondary and tertiary industries.

All non-numeric data in the Chinese dataset was translated into English. The translation was then back-translated by a different assistant into Chinese using the procedures set out by Brislin (1993) to ensure that the data was accurately translated. When it was discovered that the translated data was inconsistent with the data in the original dataset discussions were undertaken between the translators and a final translation was agreed. A third translator checked the final version of the translation for any inconsistencies.

The dataset contained firm-level data for over 2000 SMEs in Zhejiang Province for a two year period from 2004-2005. A significant number of enterprises were excluded from the dataset for the following reasons:

- (1) The enterprise did not have any sales, which indicates it was not yet or no longer in operation.
- (2) The enterprise was foreign-owned or partly foreign-owned. Chinese government regulations that require foreign investors to provide capital from overseas mean that the capital structures of foreign-invested enterprises are unique from domestic enterprises (a total of 88 enterprises were excluded from analysis).
- (3) The enterprise was state-owned (a total of 29 enterprises were excluded from analysis).
- (4) The enterprise was collectively-owned (a total of 96 enterprises were excluded from analysis).
- (5) Enterprises registered as private partnerships (10 in total) were excluded from analysis. The small number of such enterprises meant it was impossible to statistically compare differences in capital structure with sole traders or limited liability enterprises.
- (6) The enterprise was involved in the financial services industry which has its own unique capital

structure.

(7) The enterprise was wrongly defined as an SME.

(8) The data was incorrectly entered into the database. Statistical errors are commonplace in Chinese datasets. Data that was obviously wrongly inputted was removed from the dataset.

This left 1539 enterprises in the dataset. There were two years of data for 962 of these enterprises. The dataset contained one year of data for another 574 enterprises, which had either gone out of business in 2005 or had started operations in the course of 2005.

4.4.3 Variables and econometric specification

Three different measures of capital structure were used to examine the financing behaviour of SMEs, based on their book values. Market value is not considered as the SMEs in the sample are not listed on the stock market. The three dependent variables are: total leverage (*TL*), short-term leverage (*STL*) and long-term leverage (*LTL*). Leverage is measured as total debt divided by total assets, short-term leverage as short-term liabilities divided by total assets and long-term leverage as long-term liabilities divided by total assets. Short-term liabilities are defined as the proportion of a firm's total debts that are repayable within one year. They include short-term bank loans as well as other short-term liabilities such as bank overdrafts, informal loans, trade credit and tax payables. Long-term liabilities are defined as the proportion of a firm's total debts that are repayable beyond one year. These include long-term bank loans as well as other long-term liabilities such as informal loans, directors' loans and leasing obligations.

The three dependent variables were chosen to allow the research to examine the maturity structure of debt as well as the overall debt position of SMEs sampled. They reflect the measures used in the literature for capital structure (Michaelas et al., 1999; Cassar and Holmes, 2003). The examination of both short-term and long-term measures of leverage will make it possible to determine whether the determinants of short-term debt differ from the determinants of long-term debt in the context of Chinese SMEs.

As far as independent variables are concerned, several proxies were selected that appear in the previous empirical literature. The size of the firm (*SIZE*) was measured as the log of total revenue (Titman and

Wessels, 1988). The proxy for size was measured in natural logarithm to control for any possible heteroscedasticity and ensure linearity in the data. An alternative measure of size (*SIZE2*), measured as log of total assets, was also used to test for robustness. Next, the age of the firm (*AGE*) is given as age in years (Michaelas et al., 1999; Abor and Biekpe, 2007). Age was counted as the time between the firm's registration date and the end of the tax year and rounded up or down to the nearest year. Profitability (*PROF*) is taken as return on assets i.e. net profits divided by total assets (Michaelas et al., 1999; Cassar and Holmes, 2003; Johnsen and McMahon, 2005).

To capture asset structure (*AS*) of the firms the ratio of fixed assets to total assets was used (Hall et al., 2000; Johnsen and McMahon, 2005; Nguyen and Ramachandran, 2006). Following Cassar (2004), a dummy variable (*INC*) is used to measure incorporation of the firm which takes value of 0 for a sole trading enterprise and value of 1 for a limited liability enterprise. A sole trading enterprise is one in which there is a single owner who is responsible for all the debts incurred by the enterprise. In contrast limited liabilities are incorporated enterprises. Their shareholders are not liable for the debts of the enterprise over and above their capital contribution.

To account for the possibility that industries differ in their level of competition, business environment and use of skilled workers dummy variables for each industrial category were used to control for differences in capital structure between industries.

The cross-sectional OLS regression estimated, based on the above variables, is presented in Formula 4.1:

Formula 4.1

$$Y = X\beta + \varepsilon$$

Y denotes the dependent variable which in this case is measured by three separate variables to capture total, short-term and long-term leverage. *X* represents the vector of explanatory variables of capital structure, described above, and ε stands for the error term. To account for any potential heteroscedasticity and obtain robust regression results, the estimation is conducted using White's

heteroscedasticity-consistent standard errors estimation technique. To smooth the data two-year averages of all the variables are used.

Two other variables have been used in some other studies, the increase in firm size over a three year period and the standard deviation of profits over the period covered by the data base. Apart from the fact that as this data set is cross sectional and therefore such time series based variables are not calculable, adding such variables in a real sense over determines the model as these factors already have proxies in the group of chosen variables. In addition it can be observed that as these two variables are in fact constructs of variables already contained in the model one might expect them to have the potential to be to a degree collinear with the variables from which they have been constructed.

Before the data was imported into SPSS the dataset was modified in excel format. Columns for each independent and dependent variables that were not contained in the original dataset (total leverage, short-term leverage, long-term leverage, company age, profitability, size, asset structure and legal organisation) were developed through the manipulation of existing variables in the original dataset. The statistical software package SPSS was used to carry out the regression analysis. The data on each of the dependent and independent variables was imported from excel. Once the data had been imported each of the variable characteristics was checked and relabelled if incorrect.

4.4.4 Descriptive statistics

The correlations between study variables, and descriptive statistics are presented in Table 4.3. As can be observed from the table, the correlation coefficients between regressors are not large enough to flag any collinearity problem. Over the 2 year period the SMEs in the sample had an average total debt ratio of 66 per cent. Regarding the debt maturity, the overwhelming majority of SMEs relied heavily on short-term debt rather than long-term debt to finance their operations. The average short-term debt ratio for enterprises in the sample was 62 per cent and the long-term debt ratio around 4 per cent. These findings are similar to those of Chen (2004) and Huang and Song (2005), confirming that most of the leverage of Chinese firms consist of short-term debt with minimal use of long-term debt. This suggests that firms were either unwilling to borrow in the long-term or banks are unwilling to lend in the long-term.

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Table 4.3: Descriptive statistics and correlations amongst study variables

Variable	Mean	S.D.	Min	Max	TL	STL	LTL	SIZE	AGE	AS	PROF	INC
TL	0.66	0.34	0	5	1.000							
STL	0.62	0.30	0	3.24	0.823	1.000						
LTL	0.04	0.20	0	4.32	0.512	-0.067	1.000					
SIZE	6.47	0.70	2.48	9.11	0.165	0.212	-0.031	1.000				
AGE	4.3	2.7	0	24	0.188	0.181	0.056	0.184	1.000			
AS	0.24	0.21	0	1	0.000	0.000	0.000	-0.005	0.155	1.000		
PROF	-0.01	0.08	-1.68	0.35	-0.190	-0.217	-0.005	0.243	0.065	-0.038	1.000	
INC	0.65	0.48	0	1	-0.177	-0.198	-0.011	0.298	-0.019	0.055	0.051	1.000
N	1539											

TL= Total leverage; STL= Short-term leverage; LTL= Long-term leverage; SIZE= Size; Age= Age in years; AS= Asset structure; Prof= Profitability, INC= whether incorporated or not.
For an explanation as to how each variable was constructed please see section 4.4.3

With regard to the independent variables, the SMEs in the sample had an average of 12.95 million RMB in turnover and had been in business for an average of 4.3 years. Two main explanations may be provided for the low average age of sampled enterprises. Firstly, private sector development is a relatively new phenomenon in China, and secondly the re-registration of enterprises is quite common in China. As a result the enterprise's registered age might not clearly reflect their true average age. The fixed assets of sampled enterprises accounted for 24 per cent of their total assets on average. Surprisingly, the average profitability reported by sampled SME was negative. This may result from the fact that private enterprises tend to under-report their profits to government in order to avoid excessive taxation (Gregory et al., 2000). 33.2 per cent of the enterprises in the survey were sole trading enterprises and 66.8 per cent private limited enterprises. The average turnover of sole traders was 3 million RMB and the average turnover of limited liability enterprises was 18.35 million RMB.

Table 4.4 presents the variables for 12 industrial groups. Some degree of heterogeneity can be seen among the variables in these sectors. The firms in the 'Basic Metals & Metals Products' and 'Textile & Textile Products' industry groups had the highest total debt ratio across sectors. Though they had the lowest amount of debt in their capital structure, SMEs in the 'Construction' sector were by far the largest in the sample and most profitable. The table also shows that of the assets held by SMEs the proportion of fixed assets to be found in the 'Rubber & Plastic Products' and 'Textile & Textile Products' sectors were the highest, while those in the 'Wholesale & Retail' and 'Construction' sectors were the least tangible.

Table 4.4: Summary statistics of variables on industrial basis

Industry	No. of Observations	TL	STL	LTL	SIZE	AGE	AS	PROF
Overall	1539	0.66 (0.34)	0.62 (0.30)	0.04 (0.20)	6.47 (0.70)	4.3 (2.70)	0.24 (0.21)	-0.01 (0.08)
Manufacturing								
Basic Metals & Metal Products	273	0.75 (0.36)	0.72 (0.25)	0.04 (0.27)	6.48 (0.63)	4.12 (2.70)	0.22 (0.190)	-0.01 (0.06)
Chemicals & Chemical Products	125	0.68 (0.28)	0.65 (0.28)	0.03 (0.08)	6.72 (0.79)	4.6 (2.84)	0.29 (0.20)	0.01 (0.06)
Electrical & Optical Equipment	190	0.61 (0.29)	0.58 (0.29)	0.03 (0.11)	6.39 (0.68)	4.4 (3.01)	0.22 (0.19)	-0.01 (0.04)
Food Products, Drink & Tobacco	40	0.70 (0.25)	0.67 (0.25)	0.03 (0.09)	6.48 (0.71)	4.03 (2.37)	0.27 (0.25)	-0.01 (0.09)
Machinery & Equipment	78	0.61 (0.26)	0.59 (0.26)	0.03 (0.10)	6.39 (0.60)	4.87 (2.77)	0.28 (0.20)	-0.01 (0.05)
Paper, printing & publishing	45	0.58 (0.29)	0.55 (0.29)	0.03 (0.11)	6.09 (0.61)	3.73 (3.71)	0.26 (0.14)	-0.08 (0.04)
Rubber & Plastic Products	153	0.66 (0.37)	0.63 (0.28)	0.04 (0.24)	6.24 (0.56)	4.37 (2.82)	0.31 (0.24)	-0.02 (0.08)
Textile & Textile Products	132	0.75 (0.35)	0.72 (0.35)	0.04 (0.24)	6.46 (0.62)	4.50 (2.49)	0.31 (0.23)	-0.03 (0.16)
Other manufacturing	178	0.60 (0.30)	0.57 (0.30)	0.03 (0.10)	6.36 (0.62)	3.67 (2.44)	0.21 (0.20)	0.00 (0.06)
Non- manufacturing								
Construction	69	0.49 (0.29)	0.47 (0.29)	0.02 (0.09)	7.13 (0.88)	4.73 (2.35)	0.15 (0.19)	0.01 (0.05)
Wholesale & Retail	175	0.69 (0.43)	0.63 (0.28)	0.06 (0.34)	6.63 (0.63)	4.96 (2.46)	0.15 (0.19)	-0.01 (0.06)
Other non- manufacturing	81	0.54 (0.36)	0.50 (0.36)	0.04 (0.20)	6.32 (0.79)	3.59 (2.19)	0.30 (0.30)	-0.01 (0.12)

Standard deviations in parentheses
TL= Total leverage; STL= Short-term leverage; LTL= Long-term leverage; SIZE= Size; Age= Age in years; AS= Asset structure; Prof= Profitability. For an explanation as to how each variable was constructed please see section 4.4.3

4.5 Empirical Results

4.5.1 Regression results

The regression results are presented in Table 4.5. The first three regressions report the baseline results. The signs and magnitude of the regression coefficients in the first two regressions are similar. With the exception of asset structure all independent variables are significant in both regressions. The results of the regressions for total leverage and short-term leverage are supportive of hypotheses H1a-b, H2a-b and H4a-b. There is an R^2 of 0.191 for total leverage and 0.249 for short-term leverage. In contrast, to these two regressions, the third regression differs in its magnitude and significance. With the exception of age, none of the independent variables are significant in the third regression. No support was found of the impact of firm size, asset structure, profitability and incorporation on the long-term leverage of SMEs in the sample. This may result from the limited use of long term financing by enterprises in the sample. Unsurprisingly this regression has low explanatory power ($R^2 = 0.008$). A summary of the results are provided in Table 4.6.

To test the robustness of the results, a number of additional regressions were undertaken. Firstly, the baseline regressions were re-run for manufacturing firms only. Regressions (4-6) in table 6 report the results of these regressions. The results support the findings from the baseline equations although the magnitude of the coefficients is slightly different. An alternative measure for size (*SIZE2*) based on total assets instead of total revenue was then entered into the regressions in place of *SIZE1*. Regressions (7-9) in Table 6 report the results for the use of *SIZE2*. The results are supportive of the findings from the baseline regressions with the only exception being that *AS* is significant at the 5% level respectively in regressions (7) and (8). For both regressions the relationship between leverage and asset structure is negative. However, the magnitude of the effect on total leverage is very weak.

Table 4.5: Regression results

Dependent Variables									
Independent Variables	TL Full Sample (1)	STL Full sample (2)	LTL Full sample (3)	TL Manu (4)	STL Manu (5)	LTL Manu (6)	TL Size2 (7)	STL Size2 (8)	LTL Size2 (9)
Constant	-0.142*	-0.244***	0.102*	-0.237***	-0.338***	0.101*	-0.216**	-0.242***	0.026
SIZE1	0.135***	0.148***	-0.013	0.148***	0.160***	-0.012			
SIZE2							0.155***	0.156***	0.000
AGE	0.020***	0.015***	0.005**	0.020***	0.017***	0.003*	0.016***	0.012***	0.004**
AS	-0.050	-0.044	-0.005	-0.038	-0.031	-0.007	-0.081**	-0.076**	-0.005
PROF	-1.065***	-1.072***	0.008	-1.314***	-1.331***	0.017	-1.013***	-0.998***	-0.0015
INC	-0.148***	-0.149***	0.001	-0.139***	-0.136***	-0.003	-0.190***	-0.185***	-0.004
N	1539	1539	1539	1214	1214	1214	1539	1539	1539
R ²	0.191	0.249	0.008	0.230	0.289	0.005	0.198	0.243	0.006
F-test	22.511***	31.533***	0.730	27.540***	37.476***	0.438	23.492***	30.547***	0.572

*, **, *** indicate significance at the 10%, 5% and 1% levels respectively
TL= Total leverage; STL= Short-term leverage; LTL= Long-term leverage; SIZE= Size; Age= Age in years; AS= Asset structure; Prof= Profitability; INC= whether incorporated or not. For an explanation as to how each variable was constructed please see section 4.4.3

Table 4.6: Summary of the results

H1a: Firm size is positively related to total leverage	Supported
H1b: Firm size is positively related to short-term leverage	Supported
H1c: Firm size is positively related to long-term leverage	Not Supported
H2a: Firm age is positively related to total leverage	Supported
H2b: Firm age is positively related short-term leverage	Supported
H2c: Firm age is positively related to long-term leverage	Supported
H3a: Asset structure is negatively related to total leverage	Not Supported
H3b: Asset structure is negatively related to short-term leverage	Not Supported
H3c: Asset structure is positively related to long-term leverage	Not Supported
H4a: Profitability is negatively related to total leverage	Supported
H4b: Profitability is negatively related to short-term leverage	Supported
H4c: Profitability is negatively related to long-term leverage	Not Supported
H5a: Incorporation is positively related to long-term leverage	Not Supported
H5b: Incorporation is positively related to long-term leverage	Not Supported
H5c: Incorporation is positively related to long-term leverage	Not Supported

4.5.2 Regressions with interactive variables

In order to further explain the results in the previous section a number of interactive variables were created and added to the initial regressions. A significant relationship was established between one interactive variable and both short-term and total leverage, when added to the regression- that of the interaction between incorporation and asset structure (*INCAS*). The results of the regressions are shown in Table 4.7. Once this variable had been added to the regressions the variable measuring asset structure became significant as regards its relationship with leverage and short-term leverage.

Table 4.7: Regression results using an interactive variable

Independent Variables	Dependent Variables		
	TL	STL	LTL
Constant	-0.109	-0.212***	0.103*
SIZE	0.135***	0.148***	-0.013
AGE	0.020***	0.016***	0.005**
AS	-0.238***	-0.229***	-0.009
PROF	-1.059***	-1.066***	0.008
INC	-0.213***	-0.213***	0.000
INCAS	0.275***	0.270***	0.005
N	1539	1539	1539
R²	0.198	0.257	0.008

*, **, *** indicate significance at the 10%, 5% and 1% levels respectively

TL= Total leverage; STL= Short-term leverage; LTL= Long-term leverage; SIZE= Size; Age= Age in years; AS= Asset structure; Prof= Profitability; INC= whether incorporated or not; INCAS= Incorporation x asset structure. For an explanation as to how each variable was constructed please see section 4.4.3

4.5.3 Further regressions

The findings of these regressions indicate that the relationship between asset structure and leverage differs significantly between sole trading and limited liability enterprises. To understand the differences between sole-trading enterprises and limited liability enterprises in greater depth a number of additional regressions were run. Firstly, the baseline regressions were re-run for sole trading firms only. Regressions (1-3) in Table 4.8 report the results of these regressions. Following this the baseline regressions were re-run for limited liability enterprises. The results of these regressions are presented in regressions (4-6) of Table 4.8.

Table 4.8: Regression results (sole traders and limited liability enterprises)

Independent Variables	Dependent Variables					
	TL (sole traders)	STL (sole traders)	LTL (sole traders)	TL (limited liability)	STL (limited liability)	LTL (limited liability)
Constant	-0.108	-0.391***	0.283**	-0.352***	-0.404***	0.052
SIZE	0.130***	0.173***	-0.043	0.129***	0.134***	-0.005
AGE	0.019***	0.014***	0.006	0.021***	0.017***	0.004*
AS	-0.250***	-0.235***	-0.015	0.077*	0.083**	-0.006
PROF	-1.394***	-1.368***	-0.026	-0.730***	-0.780	0.050
N	541	541	541	998	998	998
R ²	0.167	0.264	0.011	0.140	0.166	0.004

*, **, *** indicate significance at the 10%, 5% and 1% levels respectively
TL= Total leverage; STL= Short-term leverage; LTL= Long-term leverage; SIZE= Size; Age= Age in years; AS= Asset structure; Prof= Profitability; INC= whether incorporated or not. For an explanation as to how each variable was constructed please see section 4.4.3.
Sole traders are firms who are owned by a single person. This person is responsible for all debts incurred by the enterprise. In contrast limited liabilities are incorporated enterprises. Their shareholders are not liable for the debts of the enterprise over and above their capital contribution.

Similar relationships were found between three independent variables, size, age and profitability, and both short-term and total leverage, for both sole trading and limited liability enterprises. Size and age are both positively related, whilst profitability is negatively related to leverage and short-term leverage.

However, the relationship between asset structure and both short-term and total leverage differed significantly between sole trading and limited liability enterprises. For sole trading enterprises the relationship is negative at the 1 per cent level of significance for both total and short-term leverage, whilst for limited liability enterprises it is positive at the 10 per cent level for total leverage and at the 5 per cent level for short-term leverage.

As for long-term leverage, a positive relationship was only found with one variable, age, at the 10 per cent level of significance for limited liability enterprises. None of the remaining variables are significantly related to long-term leverage for either sole trading or limited liability enterprises.

4.6 Discussion of Findings

Data analysis reveals that firm size, firm age, profitability and incorporation are significantly related to the short-term and total leverage of the SMEs in the sample. Only one variable, age, was found to be significantly related to long-term leverage. As long-term leverage was only utilised by a small proportion of firms in the dataset not much significance can be truly attributed to a relationship between this independent variable and long-term leverage. The limited use of long-term financing by firms in the sample may explain the limited evidence of relationships between other variables and long-term leverage.

A significantly positive influence is found of firm size on total and short-term leverage. This suggests that SMEs that are relatively larger are more likely to be able to draw on external sources finances possibly due to lower costs of going bankrupt and greater transparency than smaller firms, which are characterised by high levels of asymmetric information. This confirms the results of previous empirical work in on the capital structure of SMEs in other developed economies (Klapper et al., 2006; Nguyen and Ramachandran, 2006) and on larger firms in China (Chen and Strange, 2005; Huang and Song, 2006; Bhabra et al., 2008).

A positive relationship between the age of the firm and both total and short-term leverage is also borne out by the data in line with the research hypotheses. This can be loosely interpreted as meaning that older firms may have earned a certain degree of reputation over time to overcome any information problems to access credit, making it less risky to lend to these older firms. These results confirm empirical research done on larger Chinese firms (Li et al., 2009) and are consistent with the predictions of the life cycle model.

A negative relationship between profitability and both total and short-term leverage is established, confirming the results of previous empirical studies on SMEs in both the developed and developing economy context (Van der Wijst and Thurik, 1993; Chittenden et al., 1996; Jordan et al., 1998; Michaelas et al., 1999; Cassar and Holmes, 2003; Sorgorb-Mira, 2005; Klapper et al., 2006; Abor and Biekpe, 2007) and on larger Chinese firms (Chen, 2004; Chen and Strange, 2005; Tong and Green,

2005; Huang and Song, 2006; Li et al; 2006; Bhabra et al., 2008). This result appears more in line with the pecking order theory than the static trade-off theory of capital structure, suggesting that firms prefer to use financing mechanisms that are less susceptible to asymmetric information. As retained earnings are the financing source with the least asymmetric information, more profitable firms may choose to use internally generated funds before resorting to external debt to finance their business operations. As a result more profitable firms tend to exhibit lower debt levels than less profitable firms.

The research findings do not support hypotheses H5a-b, showing a significantly negative relationship between incorporation and both total and short-term leverage where a positive one was expected. This suggests that sole-trading enterprises use more debt in their capital structure than limited liability enterprises. This is contrary to the findings of Coleman and Cohn (2000) which found limited liability enterprises to be more highly leveraged than sole-trading enterprises. One possible explanation for the findings is that sole-traders are able to access higher levels of debt financing than limited firms due to the fact that make greater use of informal financing and are able to borrow against the personal assets of the owner/manager.

Analysis of the data led to the discovery of significant findings that went against what was hypothesised based on the previous literature. A surprising finding was the lack of a relationship between asset structure and all types of leverage in the initial regression, indicating there is limited reliance by Chinese SMEs on asset-based financing from the banking sector. While the majority of previous empirical work demonstrates a negative link between asset structure and short-term leverage and a positive relationship between asset structure and long-term leverage, this study finds no evidence of a significant relationship between asset structure and all forms of leverage. Therefore, irrespective of whether SMEs have less or more intangible assets, there seemed to be no effect on how they finance their operations. These results seem to go against what was predicted by the static trade-off and pecking order theories, and previous empirical research in both the Western and Chinese contexts (Cassar, 2004, Huang and Song, 2006; Bhabra et al., 2008).

A number of factors may be advanced to explain this phenomenon. Information asymmetries between SMEs and their lenders tend to be relatively more severe in China than in the context of mature

economies (Bai et al., 2006). Property, the physical asset which is usually pledged as security to mitigate the negative consequences of asymmetric information, is in short supply. One reason for this is that before the introduction of the Law on Property Rights in 2007 there was limited recognition of private property rights in China (Atherton, 2008). In addition, as financing via informal networks is widely available in China there is less pressure on SMEs owner/managers to seek collateralized bank finance than is the case in mature and other developing economies (He and Cao, 2007). Compared to other countries China is characterised by high rates of domestic savings and high levels of trust between family and social groups. As a result there is a greater willingness than elsewhere for personal loans to be made unsecured against physical assets. The high levels of control aversion exhibited by SMEs owner/managers in China also lead to a greater reliance of SMEs on internal and informal sources of financing than is the case in mature economies, negating the need for collateralised finance. Even if firms are able to access financing from external sources they might not do so through the fear of losing control over their own business and subjecting their business activities to greater government scrutiny than would be the case if they did not use external financing.

Further regressions using an interactive variable (INCAS) indicate that the relationship between asset structure and leverage differs considerably between sole trading and limited liability enterprises in the sample. For both forms of legal organisation the relationship was significant; for sole trading enterprises it was negatively significant whilst for limited liability enterprises it was positively significant. These findings suggest that limited liability enterprises make greater use of formal financing than sole trading enterprises. Why might this be the case?

One reason might be the fact that sole traders tend to be more information opaque than limited liability enterprises. Financial institutions are less willing to lend to such enterprises due the high costs of monitoring the loan contract which result from information asymmetries between lender and borrower. The lack of separate legal personality for sole traders might also lead to a reluctance on the part of the owner/manager to borrow against the assets of the firm when financing their business operations for the fear they may be personally responsible for the business debts if the firm is unable to pay back the loan (Becchetti and Trovato, 2002). This may result in them choosing informal financing mechanisms which do not require the use of fixed assets as security. The findings might also be explained by the greater

use of informal sources of financing by smaller enterprises, most of which are sole trading enterprises (Tsai, 2002; Allen et al., 2005; Huang, 2006, Ayygari et al., 2008). The benefits of limited liability, in terms of access to external financing, might not be needed by owner/managers of many sole trading enterprises who have considerable intangible assets wrapped up in their relationships with others.

Compared to the West, there is greater willingness within Chinese family, social and business circles, for individuals to make personal unsecured loans to others. The high domestic savings rate and limited investment opportunities on the Chinese mainland means there is huge potential for enterprise owner/managers to borrow informally through familial and social/business connections. For enterprises in their early stages of investment these sources of investment are difficult to exhaust and the security underwriting lending based on it impossible to observe. This type of lending is not necessarily directly connected to the purchase of physical assets. Most often such lending arises in an ad hoc manner to temporarily cover the costs of working capital and is unrelated to the size of the loans made. Lending is in practice 'secured' against social capital i.e. the intangible assets of filial obligation and *guanxi*, more generally. Finally, the negative relationship between capital structure and both short-term and total leverage for sole trading enterprises might be the fact that there is a greater tendency for sole trading enterprises to borrow against the personal assets of owner/managers and personal guarantees from owner/managers than limited liability enterprises. These personal assets might not necessarily show up on the firm's balance sheet, although they might be used as security.

One has to adopt some caution in interpreting these results but it is clear that the determinants of capital structure of SMEs operating in the Chinese context differ somewhat from those in other countries. In many ways the reality of these results could be seen as unsurprising. China differs markedly from other countries in a number of respects highly pertinent to the applicability or not of the static trade-off and pecking order theories. The lack of a truly competitive capital market in China means it is difficult for SMEs to trade-off equity against loan capital as the static trade-off model would predict. Due to the fact that the capital markets are state managed and controlled private SME face difficulties raising equity finance. The market for lending is also not very competitive. Local and national directives are regularly given to banks about the type and volumes of lending they can make. In this market, private SMEs are disadvantaged compared to state-owned enterprises.

In line with the findings of research on SMEs in both mature and developing economies (Holmes and Kent, 1991; Watson and Wilson, 2002; Klapper et al., 2006) limited evidence is found to suggest that owner/managers trade-off the benefits of debt and equity when making financing decisions. The fact that SMEs in both mature and developing economies have limited access to formal debt and equity markets renders the static trade-off theory less applicable to explaining their financing behaviour. The findings of this chapter suggest that the pecking-order and financial life-cycle theories of capital structure might provide a viable explanation of the financing behaviour of Chinese SMEs. The hypothesised determinants for the pecking-order theory hold true for the limited liability sampled enterprises, where a positive relationship between asset structure and both short-term and total leverage is borne out in the data. Although no relationship is found between these variables and long-term leverage, this only makes up a small proportion of enterprise financing in the sample. As for sole trading enterprises the findings of this research provide limited support for a pecking-order in their financing choices. The negative relationship between asset structure and both short-term and total leverage indicates little use of formal bank financing by the sole-trading enterprises in the sample. In line with previous studies (Gregory et al., 2000) the hypothesised determinants for the life-cycle theory of capital structure hold true for both sole trading and limited liability enterprises in the sample. A positive relationship is found between both firm size and firm age and the two measures of leverage that, as it turns out in the sample, are virtually the same thing, total leverage and short-term leverage. However, the fact that the enterprises in the sample, in the very early stages of their financial life cycles with an average age of 4.5 years, means that the applicability of the life-cycle theory of capital structure cannot be fully tested. Due to the short history of SME and financial market development in China, this sample cannot provide the range of firms across the life cycle of birth-growth-decay to enable the chosen estimators to be truly used to identify parameters pertinent to the life-cycle model.

4.7 Policy and Managerial Implications

The research findings of this chapter have some important implications for policy makers in China looking to support the development of small and medium-sized enterprises. The lack of a positive relationship between asset structure and leverage for sole-trading enterprises indicates that they face substantial difficulties in accessing external sources of finance. The Chinese government authorities

should recognise the importance of providing unincorporated enterprises with increased support to improve their ability to access formal sources of financing. This may be done through further liberalisation of the financial sector to allow for greater competition between financial institutions in SME lending, and by the establishment of an effective nationwide credit rating system for SMEs. Development of such a system should reduce the costs inherent in screening the lending applications of SMEs and lead to an increased willingness on the part of financial institutions to lend to SMEs. Local governments could also consider setting up credit guarantee schemes or provide funds which may be used to guarantee lending to SMEs in their area. Although a nationwide network of credit guarantee schemes has been established there is little evidence to show that they have contributed to a considerable increase in the reallocation of financing towards SMEs (Fung et al., 2007). Previous research suggests the bureaucracy inherent in existing credit guarantee schemes makes applying for a guarantee as time consuming as applying for a bank loan (Mu, 2002). Policy makers should give consideration to making the process of applying for guarantees more straightforward than is the case at present. The government authorities might also consider advancing low-cost non-default loans especially to sole-trading enterprises in order to help them survive in the early stages of their business growth.

The research findings provide a number of important implications for SME owner/managers. They indicate that managers should consider incorporation as a means of improving access to external sources of finance, especially from the banking sector. This may result from the tougher disclosure requirements placed on limited liability enterprises, resulting in improved transparency and greater trust between the enterprise and financial institutions. The negative relationship between asset structure and capital structure for sole trading enterprises in this sample also suggests it is of crucial importance for their owner/managers to cultivate strong business networks in order to improve their ability to access adequate sources of finance. Maintaining strong business networks with customers and suppliers should make it easier for SMEs to obtain finance from informal networks, and through trade credit.

The research findings also have important managerial implications for foreign multinationals operating in China. When developing relationships with Chinese suppliers and customers, they must be aware of the difficulties that they might face in accessing external sources of finance. They may consider

providing financial training and assistance to their Chinese partners as a way of helping them to access external sources of finance.

4.8 Limitations and Suggestions for Future Research

The primary limitation of this chapter concerns the generalisability of its findings. As the enterprises sampled are only from one city in a single province, the extent to which the findings can be generalised to the whole population of SMEs in China is brought into question. Approaches to financing differ markedly from province to province, and even within provinces (Gregory et al., 2000). Further research needs to be undertaken on the capital structure of SMEs in a number of different geographical locations before it can be established whether the findings of this chapter can be generalised to the Chinese economy as a whole.

Due to a lack of time series data it was not possible to test whether the findings were replicable over a longer period of time. The lack of extensive data on the years prior to 2004 also prevented examination of a firm's growth opportunities as a determinant of capital structure, a factor which has been found to be significant in determining the capital structure of SMEs in previous studies (Cassar and Holmes, 2004). As banks tend to lend to firms with healthy sales growth records, a firm's growth opportunities, as measured by growth rate in sales should play an important role in influencing the capital structure of SMEs. The omission of this important variable might have led to misspecification of the regression model. Chapters 5 and 6 of the study address this limitation by examining the role of growth intentions in determining the capital structure of SMEs. The lack of longitudinal data also meant more sophisticated analytical methods such as GMM were not utilised in this research. OLS ignores both firm-specific heterogeneity and potential endogeneity of regressors. If longitudinal data had been available it would have been possible to perform a series of robustness checks through the use of GMM regressions. This would have allowed firm-specific heterogeneity and potential endogeneity of the independent variables to be taken into account. Qualitative work in Chapter 5 should also assist in dealing with the endogeneity issues in this chapter.

The lack of suitable proxies in the data meant that a number of factors that have been used in previous research to explain the financing decisions of SMEs could not be tested. One such factor is the network ties possessed by the SME. This has been shown previously to be an important factor determining the ability of SMEs to access adequate debt financing in developing countries (Nguyen and Ramachandran, 2006). The extent to which a firm's network ties with other economic actors impact on its capital structure will be investigated in greater depth in the following two chapters.

The dataset also failed to provide a detailed breakdown of different types of financing used by the sampled SMEs. This makes it impossible to distinguish between the proportion of formal sources of finance from the banking sector, trade credit and informal financing in the capital structure of SMEs. Although previous studies suggest a large proportion of SME financing comes from the trade credit and informal loans provided by larger SOEs (Qiu, 2007) it was impossible to verify this using the present dataset. Interview and survey research in the following chapters should assist in our understanding of importance of trade credit and informal financing to Chinese SMEs.

Another limitation may arise from the quality of data used in the study. Although it was collected in line with the Accounting System for Small Business Enterprises, adopted by the Ministry of Finance in 2004 to ensure greater conformance to international norms, there is an inherent possibility of inaccuracy in reporting. Although misreporting problems are common to all countries they are likely to be greater in China as a result of enterprises underreporting and misreporting their true financial position to government authorities to avoid excessive taxation and government interference (Gregory et al., 2000). This is likely to be more so for SMEs as they face less stringent financial reporting requirements under the Accounting System for Small Business Enterprises than is the case for larger enterprises under the Accounting System for Business Enterprises (Chindelly Consultancy, 2005). Commentators also note that although the existing set of accounting standards in China should have narrowed the gap between accounting issues between China and the West, the rigour of applying the accounting regulations in China may differ quite widely from province to province, and even from company to company (Lehman et al., 2010). Even with these limitations this study makes a valuable contribution to the literature due to the fact that large datasets on Chinese firms, like the one used in this study, are extremely difficult to gain access to, and few have been the focus of work in

international journals.

This chapter also was unable to consider how a multitude of other factors influence on the financing decisions of SMEs due to limitations in the dataset. Previous empirical work confirms that managerial strategy, psychology and human capital are important factors that may determine the capital structures that SMEs evolve (Barton and Matthews, 1989; Cressy, 1995; Chittenden et al., 1996; Jordan et al., 1998; Michaelas et al., 1999; Berggren et al., 2000; Romano et al., 2000; Cassar, 2004). As with network ties the extent to which these variables influence the capital structure of Chinese SMEs will be addressed in the following two chapters.

4.9 Conclusion

This chapter examined the determinants of the capital structure of a sample of 1539 private SMEs from Zhejiang province. Firstly, the background of this research was discussed and the theoretical literature related to the capital structure of SMEs examined. The empirical hypotheses were then developed based on the existing literature. Next, the methodology of this research was outlined. In the following section the empirical results were presented and the policy and managerial implications of the research findings discussed. Finally, the limitations of this research were examined.

The findings suggest that Chinese SMEs rely on short-term debt financing to a far greater extent than SMEs in other economies, with long-term debt financing playing a limited role in their capital structure. Size, age, profitability and incorporation were found to have a significant impact on a Chinese SME's short-term and total capital structure, and age was significantly related to its long-term leverage. As for asset structure, a positive relationship was found with short-term and total leverage for limited liability enterprises whilst a negative relationship was found for sole trading enterprises. It is argued that these findings pertain to the nature of the Chinese context, where SMEs evolve, which has unique characteristics different from the developed world, and even from other developing nations.

At first glance the results obtained seem to suggest that the capital structure of Chinese SMEs might be better explained by the lifecycle theory than both the pecking-order and static trade-off theories.

However, after further analysis the hypothesised determinants of the pecking-order theory seem to hold true for limited liability enterprises in the sample. This suggests that limited liability SMEs tend to organize their financing hierarchically, with a preference for internally generated sources of funds.

The next chapter of this dissertation qualitative research will examine the reasons why private SMEs in China rely overwhelmingly on short-term financing, and explore the relationship between asset structure and capital structure that was found to be important in the sample. The extent to which managerial strategy, psychology, human capital and network ties impact on the financing decisions of SMEs, will also be investigated.

CHAPTER 5: CAPITAL STRUCTURE OF SMES: FURTHER INSIGHTS FROM INTERVIEWS

5.1 Introduction

In the previous chapter quantitative analysis of secondary data revealed a number of important findings. It indicated that sampled SMEs tended to rely heavily on short-term debt to finance their business operations in the period 2004 to 2005. Data analysis also established that the relationship between asset structure and leverage differed considerably between sole trading and limited liability enterprises in the sample. For both forms of legal organisation the relationship was significant; for sole trading enterprises it was negatively significant whilst for limited liability enterprises it was positively significant. This indicates the limited use of formal financing mechanisms by sole-trading enterprises in the sample.

In this chapter semi-structured interviews with SME managers are utilised to gain a greater insight into the findings from the previous chapter. Interviews provide them with an opportunity to explore their personal experiences and first hand observations. They are asked a series of questions in relation to the financing of their business. These questions are designed to help ascertain the main factors that impact on the financing of SMEs.

In order to effectively understand how SMEs choose between different types of finance it is important to ascertain the extent to which factors, other than firm-level financial variables, determine the capital structure of SMEs. Previous work suggests that financial theories alone may not provide a full explanation as to how SMEs are financed (Barton and Matthews, 1989; Matthews et al., 1994). Empirical studies in both developed and developing economies suggests that the network ties possessed by firms, in terms of its relationships with executives from other firms, government officials and bank officials, might influence its ability to access external finance from banks and other financiers (Uzzi, 1999; Nguyen and Ramachandran, 2006; Le and Nguyen, 2009). The literature also highlights the influence of managerial objectives, psychology and human capital on the financing decisions of SMEs (Barton and Matthews, 1989; Matthews et al., 1994; Cressy, 1995; Berggren et al., 1997; Cressy and Olofsson, 1997; Romano et al., 2000; Cassar, 2004).

Semi-structured interviews will provide greater insight into how these factors influence the capital structure of SMEs in the Chinese context. Although research has been conducted on the firm-level determinants of capital structure of SMEs in the developing economy context (Klapper et al., 2006; Nguyen and Ramachandran, 2006; Abor and Biekpe, 2007), and on large Chinese firms (Chen and Strange, 2005; Huang and Song, 2006; Li et al. 2006; Li et al., 2009, Bhabra et al., 2008), there does not appear to be any empirical work examining the impact of managerial strategy, psychology, human capital and network ties on SME financing in China.

In this chapter the research questions are presented and the methodology introduced. Following this, the process of data analysis is outlined. Next the results are presented and discussion undertaken. Finally, the limitations of this chapter are examined and conclusions made.

5.2 Research Questions

A number of broad research questions were developed :

- Why do Chinese SMEs rely so heavily on short-term financing compared to their counterparts in developed economies?
- Why does the nature of the relationship between asset structure and capital structure differ between sole-trading and limited liability SMEs?
- How important are a firm's network ties, in terms of the firm's relationships with other economic actors including executives from other firms, bank officials and government officials, to the financing of SMEs?
- To what extent does political participation improve the ability of SMEs to access external sources of finance?
- To what extent does building a good relationship with external financiers over time improve the ability of SMEs to gain access to external sources of finance?
- To what extent do the personal characteristics of owner/managers impact on how SMEs finance their business?
- To what extent do the strategic objectives of owner/managers impact on how SMEs finance

their business?

After defining the main research questions it is important to select an appropriate means to address them methodologically. Semi-structured interviews are chosen as the research method. The semi-structured interviews in combination with existing literature would allow for the development of a theoretical model that could be tested via survey questionnaires in a subsequent chapter. The methodology of the semi-structured interviews is set out in the next section.

5.3 Methodology

5.3.1 Choice of methods

In this chapter semi-structured interviews were adopted. In semi-structured interviews the researcher follows a main theme or set of questions but may vary the order in which the questions are asked, or may omit or ask additional questions depending on the particular circumstances of the interview (Saunders et al., 2003).

Semi-structured interviews with SME owner/managers were chosen as they allow for greater flexibility than would be the case in a standardised interview format. Lines of thought identified by early interviewees may be incorporated into the interview process with later interviewees (Bryman, 2008). They also permit clarification and elaboration on the answers provided by the interviewee (May, 2001), allow for adaptation of the interview questions to the respondent's level of understanding (Fielding and Thomas, 2001) and provide a greater opportunity to get closer to, and build up a rapport with the respondents, assisting them in the provision of full and frank answers to the questions asked.

Based on the research questions proposed in the previous section a number of broad interview questions were developed (see Appendix 1). This would allow the respondents to speak about the issues that were important to them. The questions served as a general guide to the areas to be covered during the interview rather than a rigid set of questions to be asked during the interview (Kvale, 1996). As the interview process went on the interview questions were updated to encompass the knowledge obtained during previous interviews. This allowed the interview time to be utilised effectively and

improved the efficiency of the interview process by helping the interviewer to save time in asking the questions in the most effective way (Kvale 1996). Prior to interviews being carried out the interview questions were translated into Chinese by a colleague bilingual in English and Chinese, who later acted as bilingual interpreter during the interview process. The translation of the interview questions was then checked by two other bilingual colleagues in English and Chinese for accuracy.

At an early stage in the data collection process a pilot study was conducted in order to determine the face and content validity of the initial set of questions i.e. to identify any problems with the phrasing and nature of questions. This allowed the identification of relevant issues that had not been addressed and questions that participants may be reluctant to answer. The pilot study was conducted in the space of a month, and consisted of two interviews with SME owner/managers who did not make up part of the original sample. After conducting a pilot study the general order in which questions were to be asked was changed. Delicate subjects were left until the end of the interview by which time the interviewer should have been able to build up an atmosphere of trust with the interviewee (Rubin and Rubin, 2005).

5.3.2 Sample selection

Interview participants were selected from the dataset of enterprises used in Chapter 4. Due to the difficulties faced in approaching the participants directly intermediaries were used to contact a number of companies to request an interview. Although the use of intermediaries resulted in the use of non-probability sampling, the difficulties associated with using probability sampling when conducting research on Chinese SMEs meant that the chosen sampling method was appropriate in the circumstances. Without introductions from intermediaries in China it would have been extremely difficult to gain the trust and confidence of potential respondents due to the mistrust of outsiders and the limited experience of senior managers in participating in survey research. Previous research highlights the challenges faced in using representative sampling techniques in China (Zheng et al., 2006; 2009). Two main intermediaries were used to gain access to the research participants; a government official and a local entrepreneur. Intermediaries were used to provide introductions to the research team and assure the respondents that replies would be voluntary and kept confidential.

All research participants were either the chief executive officer (CEO), chief operating officer (COO) or chief financial officer (CFO) of the enterprises. Care was taken to ensure that enterprises from a number of different industries were included in the sample of companies interviewed to ensure that the sample was as representative of the total population as possible. In total, 24 interviews were conducted with research participants from enterprises until it was felt that saturation point had been reached i.e. it was felt that additional interviews would not provide additional insights into how SMEs are financed.

To gain alternative viewpoints on the research issues a bank manager and government official were also interviewed in addition to the respondents from industry. The bank manager had many years of dealing with issues regarding SME financing and the government official was head of the economic bureau charged with supporting the development of SMEs in the local area. It was felt that interviews with these respondents might help us to gain further understanding as to how bank and government policies impact on SME financing.

5.3.3 Data collection

As very few of the participants interviewed were fluent in English, an interpreter was relied upon during the interview process. The interpreter's role was to translate the research questions into Chinese and to translate the answers provided by respondents into English. When permission was granted, the interviews were recorded to allow for thorough analysis of what was said, and ensure that interview findings were not biased by failure to remember what was said during the interview process. Recording the interviews allows the data to be opened up to scrutiny from other researchers, assisting in counteracting accusations that the research findings may be influenced by the values and biases of the researcher (Bryman, 2008). Before interviews were conducted participants were asked to consent to the interviews being recorded. A promise was made to maintain the confidentiality of participants in any data collected during the interview process. Only one research participant (Respondent J) refused to give permission to have their interview recorded. For this interview, notes were taken by the Chinese research assistant to aid with later data analysis.

When conducting interviews an atmosphere of trust and understanding was created to ensure participants felt comfortable in sharing their own experiences and opinions (Miller and Glassner, 2004).

To create such a climate it was important to build rapport with the interviewee. Patton (1990) highlights the importance of recognising the knowledge, experience and feelings of interviewees in building rapport. In order to build rapport the interviewer took care to find background information on the respondents and the firms they represented from the intermediary before the interviews were conducted. Care was also taken to give face to research participants. Strategies used to give face included lavishing praise on the interviewee and asking the interviewee to share his or her knowledge and experience with the interviewer. Care was also taken to maintain neutrality and avoid being judgemental during the interview (Patton, 1990; Miller and Glassner, 2004).

The fieldwork was conducted during November 2008 over six whole days. Between four and six interviews were conducted on each day. The time spent interviewing respondents totalled approximately 15 hours. The interviews lasted between 25 and 50 minutes. A total of 26 interviews were conducted with respondents. Table 5.1 provides data on the participant firms and organisations and the job titles of the respondents.

The issue of maintaining confidentiality and protecting the identity of research participants is an extremely important part of any empirical research study. Before deciding whether or not to participate in the interview potential respondents were briefed about the research. They were informed that the interview data would only be used for academic purposes and that they would be guaranteed confidentiality. They were told the names of respondents and their organisations would not be identified in any research output. Consent forms were then obtained from the respondents who had agreed to cooperate in the research. Such guarantees of maintaining confidentiality ensured that respondents would be full and frank in providing sensitive information during the research process, knowing that their identity would be protected. It is believed the confidentiality of respondents was ensured according to the interviewees' wishes without compromising the integrity of the findings.

Table 5.1: Information on interview respondents

Firm/ Respondent	Industry	Position of Respondent	No of Employees	Turnover (RMB)
A	Medical products (retailer/wholesaler)	CFO	300	500 million
B	Gas supply (retailer)	CEO	56	100 million
C	Construction	CFO	60	400 million
D	Information technology services	CEO	15	15 million
E	Construction materials (manufacturer)	CEO	200	60 million
F	Electric fan (manufacturer)	CEO	760	N/A
G	Machine (manufacturer)	CEO	N/A	N/A
H	Real Estate	CEO	N/A	N/A
I	Textile (manufacturer)	CEO	700	175 million
J	Construction materials (manufacturer)	CFO	400	120 million
K	Machine (manufacturer)	CEO	200	80 million
L	Pipe (manufacturer)	COO	18	5-6 million
M	Pipe (manufacturer)	COO	70	100 million
N	Steel structures (manufacturer)	CEO	100	20 million
O	Textile (manufacturer)	CEO	86	10 million
P	Food processing	CEO	45	10 million
Q	Textile machine (manufacturer)	CEO	47	7 million
R	Machine tools (manufacturer)	CEO	30	5-6 million
S	Steel (wholesaler)	CEO	10	30 million
T	Automobile (retailer)	CFO	30	60 million
U	Coal (retailer)	CEO and CFO	7	30 million
V	Lighting (manufacturer)	CEO	600	150 million
W	Machine (manufacturer)	CEO	350	7.2 million
X	Food processing	CEO	200	60 million
Y	Government official	Head of economic cooperation bureau		
Z	Bank official	Branch manager		

As soon as each interview finished the recording was transcribed into Chinese by a research assistant who acted as interpreter during the interview process. Another research assistant checked the tapes and transcriptions for accuracy and edited when appropriate in discussion with the first research assistant. The interview transcripts were then translated into English by the research assistants. The translations were then checked by another bilingual speaker for accuracy. Data analysis was carried out as soon as possible after each interview had finished to understand the emerging themes in the data which could be incorporated into subsequent interviews (Bryman, 2008). Research assistants were utilised during the transcription and translation process to ensure accuracy and subtlety in translation (Marshall and Rossman, 2006).

Care was taken to ensure the findings from semi-structured interviews were as valid and reliable as was possible. Validity can be understood as being concerned with measuring adequately what the researcher has intended to measure (Silverman 2001). The literature distinguishes between internal and external validity. A number of strategies were used to improve the internal validity of the findings. Feedback was sought from academic colleagues and from industry respondents in pilot interviews in the drafting of the initial interview script to help improve the face validity of the questions. The internal validity of the research was also improved by getting feedback from the key respondents during the interview process and after the transcription had been conducted. Care was taken to ensure that the interviews were recorded and the interview transcripts consistently and thoroughly analysed. Of the 26 interviews conducted, all but one was recorded.

External validity concerns the extent to which the findings from the research can be generalised to the wider population (Yin, 1994). A common criticism levied against qualitative research is the limited number of respondents makes it difficult to generalise the findings (Bryman, 2008). Care was taken to improve the external validity of the research by ensuring that the sample of firms chosen was as representative of the general population as possible and was diverse enough to suggest broader applicability (Miles and Huberman, 1994).

Reliability can be understood as being concerned with the consistency and trustworthiness of the research findings (Bryman, 2008). Miles and Huberman (1994) state the main concern of reliability is whether the process of carrying out the research is consistent, stable over time and replicable using different researchers and methods. Issues of reliability also may arise in connection with the transcription and translation of the interviews, as to whether different interviewers will come up with similar transcripts and translations from the same interviews. To ensure that this research study conformed to the criterion of reliability great care was taken to carefully record the research procedures and review the research instruments. Research questions and coding categories were examined by academic colleagues and a number of key informants before their final utilisation (Miles and Huberman, 1994). Reliability was also improved through recording and careful transcription and translation of the interviews (Silverman, 2001). As previously mentioned translations were double checked for accuracy by more than one assistant bilingual in Chinese and English.

5.4 Data Analysis

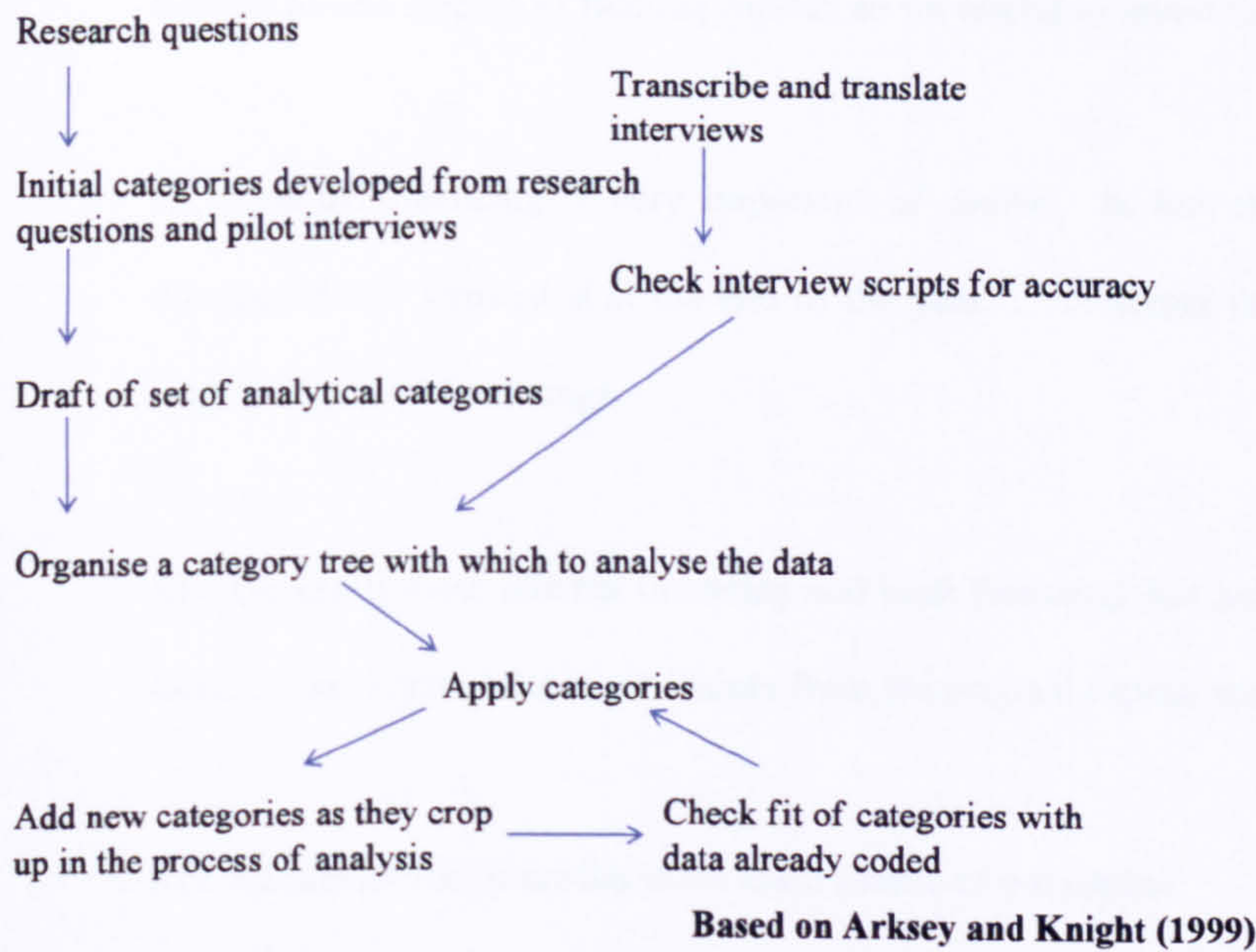
This section explains how the analysis of the interview data was undertaken. Coding was the main form of analysis used on the interview data. Coding has been defined as the attribution of keywords (categories) to a section of text to enable later identification and retrieval of the statement (Kvale, 2007). Codes are tags or labels which allow for the assignment of meaning to chunks of text, which may be single words, sentences or whole paragraphs (Miles and Huberman, 1994).

A thematic approach was adopted to attach codes to themes in the interview data (Ryan and Bernard, 2003). The coding of the interview data began during the process of data collection, as soon as the first set of interview transcripts had been translated into English. The use of coding enabled quantification as to how often specific themes were addressed in the interviews and quick retrieval and examination of statements from across all of the interviews that refer to the same theme (Rubin and Rubin, 2005; Kvale, 2007). In this study the interview data was coded by hand. A decision was made not to code using computer programmes as coding by hand allowed better understanding and close examination of the interview data. The limited number of respondents also made the coding of the interview data by hand relatively easy than may have been the case with a larger amount of data.

A mixed approach to coding was adopted. An initial starting list of analytical categories (codes) was developed prior to conducting the interview fieldwork. That list was based on the initial research questions and the literature (Marshall and Rossman, 2006). The starting list allowed the development of a category tree with which to analyse the interview data as it was collected and attribute codes to statements made by respondents in the interviews. Secondly, as the data analysis was carried out new categories of codes were developed to encompass themes that were uncovered during the process of analysing interview transcripts. In qualitative research it is important to ensure relevant issues emerge from the analysis of the data rather than simply deciding in advance the major issues that will be addressed (Patton, 1990). Once a new theme had been identified in the interview data a new coding category was developed. The new coding category was then applied to the data already coded. Coding of the data proved to be time-consuming. Great care was taken to ensure the analysis was undertaken to ensure that the analysis was as close to the data as was feasibly possible.

In total a number of 14 broad coding categories were developed. Figure 5.1 illustrates how the process of coding was undertaken.

Figure 5.1: Process of data analysis



5.5 Presentation and Discussion of Findings

5.5.1 Introduction

In the following sections the main findings from interviews with key respondents are presented and discussed. The findings are separated into categories that were developed based on the research questions and uncovered during the interview process.

5.5.2 Internal financing

The respondents were initially asked what sources are used by their firms to finance their business activities. Analysis of the interview data indicated that internal financing via investment of profits is one the main sources of financing for enterprises in the sample. Although analysis of quantitative data in Chapter 4 suggested the profitability of SMEs in this area of Zhejiang was quite low, discussions with SME owner/managers did not suggest this was the case. This may result from the fact that either

the interview sample was biased towards profitable SMEs or that SMEs typically under-report their profits to the government authorities. The importance of internal financing to the financing of their business operations can be illustrated by the following comments from a number of respondents:

RB We have a surplus of floating capital, so we intend to invest the excess money we have.

RC: Internal financing is very important of course. In our company, the profits are not distributed and reinvested at the end of the year..... internal financing accounts for 70 per cent (of our total financing).

RD: Generally I use internal financing and bank financing just accounts for a small part of the total..... our internal funds are mainly from the original capital and profits.

RO: Accumulation of profits is the main source of our capital.

One of the respondents revealed his firm reinvested profits to fund the operating costs of the business and only used bank financing when expanding and investing in new projects.

RK: We use our previous profits to invest in technical production. But as we increase the scale of the company and start new projects, we have increased the amount of bank financing.

Two firms in the sample, firm R and firm S, revealed that they solely relied on accumulated profits to finance their business activities. When asked why they did not use external sources of finance they provided the following answers:

RR: I have plenty of capital and don't need external financing any more.

RS: Our capital is sufficient now...we don't need any financing at present. I just want to keep the business at its present scale and don't consider further development.

These comments suggest that firms with limited growth intentions and sufficient internal sources of finance will have less debt in their capital structure, confirming the findings from previous empirical work (Cressy, 1995; Michaelas et al., 1999; Berggren et al., 2000).

Only one respondent indicated that his firm did not rely on internal sources of finance to fund investment. He stressed the limited growth opportunities of his firm meant there was little need to reinvest profits:

RA: We don't accumulate a lot (of profits). We just use the original investment, bank finance and some credit finance

The findings from interview data provide further support for the findings from the previous chapter and empirical work which demonstrates a negative relationship between profitability and leverage (Van der Wijst and Thurik, 1993; Chittenden et al., 1996; Jordan et al., 1998; Michaelas et al., 1999; Cassar and Holmes, 2003; Sorgorb-Mira, 2005). Although many respondents did not directly point out how their profitability influenced the capital structure of their business, those that did suggested that firms with greater access to internal financing via investment of profits tended to rely less on debt financing. Such findings support the assertions of the pecking order theory (Myers, 1984) which proposes that firms will only seek external sources of finance when they have exhausted all sources of internal finance.

5.5.3 Bank financing

When asked what sources of finance are used by their firms the overwhelming majority (83.3 per cent) of respondents confirmed the use of bank financing in their capital structure. Only a small proportion of firms (16.7 per cent) did not use any bank financing at all. The others used varying amounts of bank financing. Whilst some mainly rely on internal sources of finance and informal financing mechanisms, others rely heavily on bank financing. The respondents were asked to indicate how important bank financing was to the capital structure of their firm. A number of respondents indicated it was the main source of finance for their firms.

RG: Bank financing is the main source of capital for our firm.

RH: 90 per cent of our financing is bank loans.

RX: Our primary source (of financing) is bank loans...without their (the banks) support, it would not be possible for us to buy land and equipment, and to build a factory.

Several respondents highlighted the critical importance of bank financing to the capital structure of their firms, revealing that other sources of finance are not sufficient to fund sustained business growth.

RN: In the past we just needed a small amount of money, so we always borrowed from individuals. Now we need several million in capital, so we borrow from the bank.

RP: We finance from the bank if our own capital is insufficient...it accounts for around 48 to 50 per cent of our financing now.

A small proportion of respondents in the sample (16.6 per cent) revealed that their firms use no bank financing at all. The following comments provided by respondents highlight a number of reasons for the lack of bank financing in the capital structure of their firms:

RB: We have enough money to finance our business unless we decide to develop our business further.

RD: We don't need a large amount of money from the bank...we mainly provide business services so we don't need too much money.

RU: Borrowing money from the bank is so inconvenient. You should guarantee your debts by assets, and the procedure is long and inconvenient'.

The above comments suggest that the availability of internal financing sources, limited investment opportunities and the difficulties faced in applying for finance from the bank may lead to the limited

use of bank financing by some firms in their capital structure.

Overall the findings from analysis of interview data suggest that bank financing is becoming more widespread as a source of business financing for SMEs, especially those with limited liability. Over 90 per cent of firms in the sample stated they were able to borrow money from the bank if they choose to do so. This seems to contradict previous work which suggests that private SMEs continue to face huge constraints in accessing finance from the banking sector (Farrell et al., 2006).

5.5.4 Prevalence of short-term bank financing

When the respondents confirmed the use of bank financing in the capital structure of their firms they were asked to indicate whether they borrowed mainly in the short or long-term. Their responses to this question seem to confirm the results of the previous chapter; that the overwhelming proportion of SME bank financing is short-term in nature. Out of the firms in the sample around 80 per cent had no or very little long-term bank financing in their capital structure. Only respondents from around 20 per cent of firms indicated the use of significant amounts of long-term financing in the capital structure of their firms. In this section the explanations provided by respondents for the popularity of short-term over long-term financing will be examined.

The following comments made by respondents indicate that the complicated application and approval procedures are one of the factors that make it difficult for SMEs to access long-term financing from financial institutions.

RE: Since last year the credit cooperative started to do project financing which is long-term. However the application procedure is very complicated.

RQ: The procedure (of applying for long-term loans) is troublesome and you have to pay back the principal loan before the due date.

RI: A three or five year loan is difficult to apply for.

The following comments made by the branch manager of a state-owned bank substantiate the views of respondents from industry, indicating that the relatively straightforward application and approval process for short-term financing compared to that of long-term financing leads to the limited use of long-term financing in the capital structure of SMEs.

RZ: Generally, it is more complicated for firms to get long-term debt approval from the banks. It involves an evaluation process of the investment project and a market investigation. It might take around three to four months to complete this work. Hence, the application process for a short-term loan is comparatively simple and less time-consuming. Usually one month is enough. For these reasons, SMEs prefer short-term loans.

She then went on to comment:

RZ: I think the difference in the application process is the major reason. You know, firms prefer immediate money and banks prefer less work.

The comments provided by a number of respondents indicate that many firms have no choice but to apply for short-term financing because their lenders do not provide long-term loans.

RE: Banks don't provide long-term financing to us.

RG: Generally the bank only offers short-term loans.

RX: Banks only issue one-year loans.

A number of respondents indicated that the type of financing used by their firms is determined by what the capital is needed for. The following comments reveal that banks only provide long-term financing for certain types of investment:

RC: We mainly use short-term financing...long-term debt is used as project debt or real estate

operating debt.

RK: There are two types of bank loans; one of them is for investment in long-term projects, and the other for liquid capital in the short-term.

The following comments from a branch manager of a state-owned bank support the above comments indicating it is bank policy only to lend money for certain types of project:

RZ: Generally, we only lend long-term money to firms for technology transfer, the purchase of land, building new factories, or purchasing equipment...As for the purpose of borrowing for daily operation expenses, such as buying raw materials, we prefer to lend in the short-term in the form of a working capital loan with a period of one year.

A further explanation for the prevalence of short-term financing was provided by a government official who suggested that many SMEs rely on short-term financing because they did not invest in fixed assets, simply needing money to finance the daily operation of their business.

RY: Long-term loans are usually used for investment in fixed assets, for example, building factories and buying equipments. As for short term loans, they are used to borrow money for the daily operation and production.

Several respondents emphasized that the renewable nature of short-term debt means it is more like long-term debt in practice.

RA: We mostly borrow in the short-term for periods of three, six or nine months. When the loans expire we renew them, so in actual fact the short-term debt is more like long-term debt in practice.

RH: Our assets are used as collateral for short-term loans and the loans are renewed every time, so they are like long-term loans.

The following comments made by a government official suggest that SMEs, unable to access long-term financing from their banks, rely on short-term financing which they renew on a regular basis:

RY: When a SME fails in getting adequate long-term financing from banks it may use its current capital to solve the financing problem and keep renewing its short-term loans regularly. Consequently, the proportion of short-term financing becomes larger.

Although short-term financing was more prevalent than long-term financing in the capital structure of most firms, a number of respondents forwarded the opinion that they would prefer long-term financing if their bank was willing to provide it.

RC: The longer period would be better for us so that we don't need to renew every year. However, banks may not be willing to lend for a longer period because it is risky.

RP: It (long-term financing) would be better for us. Previously, I explained to the Banking Regulatory Bureau that paying back the principal loan every year increases the burden on enterprises. If the amount of principal is very huge, I have to borrow from friends, even from guarantee companies. Such a requirement may cause financial chaos.

RX: Generally for enterprises, long-term loans are definitely more favourable. But now banks only issue 1-year loans, they do not issue long-term loans.

A number of respondents explained the difficulties faced in having to renew short-term debt meant they would prefer long-term over short-term financing if it was available to them.

RQ: Long-term financing is better because renewing debts is inconvenient for us. The procedure is troublesome and you also have to pay back the principal loan before the due date.

RV: When I renew the loan, I need to prepare money, say 10 million. I have to prepare ten million and deposit it in the bank as repayment. After two or three days, I borrow them from the bank again. You know, it's tedious.

A preference for short over long-term financing was indicated by a number of respondents. The following comments underline the reasons why many firms do not seek long-term financing:

RD: We prefer short term financing...we don't want to have too much debt and just want to develop steadily.

RA: If it is for working capital, I think six months to one year is enough.

RO: We do not consider long-term debt. Although the procedure is more difficult when debts have to be renewed every year, we feel less pressure because if we don't need so much money, we can return it to the bank earlier than required.

RR: Generally we use short-term loans because long-term loans have a high interest rate.

Although the overwhelming proportion of firms in the sample use more short-term than long-term finance, a small number of firms use more long-term than short-term finance in their capital structure. The CEO of one of these enterprises revealed that long-term financing from banks accounts for around two-thirds of his firm's total financing. He forwarded the following comment, explaining the prevalence of long-term financing in the capital structure of his firm:

RK: For my company, we need long-term financing and long-term financing is more preferable.

He went on to stress that his company was involved in a key project of the province lasting longer than two years and therefore was able to gain access to long-term financing from the banks. He mentioned that once the project had finished the following year all the debt will be transferred into short-term debt.

The above findings support the assertion that the majority of SME financing is short-term. The analysis of interview data indicates that this reliance on short-term financing results mainly from the apparent unwillingness of banks to lend on a long-term basis to SMEs. These findings support the conclusions drawn from previous empirical studies which suggest that in developing economies such as China with weak investor protection and a relatively underdeveloped financial sector banks tend to more risk averse, resulting in a preference to lend in the short-term (Demirguc-Kunt and Maksimovic, 1999; Booth et al., 2001; Fan et al., 2006). As a result enterprises are more likely to employ short-term debt than long-term debt in their capital structure.

5.5.5 Asset structure and capital structure

In the previous chapter analysis of firm-level data revealed a negative relationship between asset structure and both short-term and total leverage for sole-trading enterprises. This was in contrast to a positive relationship for limited liability enterprises in the dataset. It was suggested that one possible explanation for the lack of a positive link between asset structure and leverage for sole-trading enterprises was their widespread use of alternative financing mechanisms, in which fixed assets are not used as security for lending. Interviews with respondents confirm the widespread use of these alternative financing mechanisms by sole-trading enterprises in our sample who have limited access to formal financing mechanisms.

The findings of the previous chapter also hinted that a firm's network ties might play an important role in allowing them to access external sources of financing, rather than fixed assets which have been found to determine capital structure in previous empirical work (Van der Wijst and Thurik, 1993; Chittenden et al., 1996; Hall et al., 2000; Cassar and Holmes, 2003; Sorgorb-Mira, 2005; Ortqvist et al., 2006). The importance of network ties to SME financing is examined later in this chapter.

It was hypothesised that another possible reason for a negative relationship between asset structure and capital for sole-trading enterprises might be the use alternative forms of security for bank loans other than fixed assets. In order to assess the use of alternative financing mechanisms respondents were asked what types of security were used when borrowing money from the bank. Respondents from sole-

trading enterprises in our sample forwarded a number of comments in response to this question, suggesting that in addition to fixed assets, sole-trading enterprises used a number of instruments as security for their banks loans including the personal assets of the owner/manager personal guarantees from shareholders and inter-firm guarantees.

RD: We use personal assets, just our home.

RN: We use both (firm assets and personal assets) but to a greater extent firm assets. I will even consider using it (an inter-firm guarantee) if we don't have enough assets as security for our debts.

The branch manager of a state-owned bank confirmed that most banks accept both the personal assets of the owner/manager as well as company assets as security when lending to SMEs. She emphasised that few firms used personal assets as security as most business owners preferred to keep their personal property and firm assets separate. However, she indicated that sole-trading enterprises would be more likely to use personal assets as collateral and personal guarantees as security when borrowing from banks.

A number of respondents use a combination of personal assets, fixed assets and inter-firm guarantees by their firms when borrowing from the bank. The importance of different types of security can be seen from the following comments.

RI: Banks have different requirements, sometimes banks want collateral, sometimes a guarantee from friends is sufficient.

RT: In the beginning we used personal assets and asked other companies to guarantee our debts. Now we also use company assets as security.

RV: Generally, we use buildings as collateral. If it is not enough, we will use a guarantee. For instance, we may ask our business partners with good reputation and relationships to

guarantee for us.

One respondent revealed that in addition to the use of firm assets as security he and the other shareholders of the firm provided personal guarantees as security. His comments illustrate the role played by personal guarantees in the ability of his firm to access finance from the banking sector.

RE: If the company fails to repay the loans, our personal assets would be used as repayment.

A number of firms use inter-firm guarantees in addition to their fixed assets as security when they borrowed from the bank. The importance of inter-firm guarantees to the external financing of SMEs can be illustrated by the following comments from a number of respondents:

RK: The assets we use as security are not sufficient, so we need a guarantee for the remainder. Generally, companies guarantee each other's business.

RM: If our assets are insufficient but we need more working capital, we will ask another company to provide a guarantee.

RP: We will use guarantees from other companies if our assets are not sufficient. In the early stages of our development, we have used company guarantees.

RQ: Generally we use company assets as security, but another company once provided us with a guarantee in the past. According to bank regulations, assets should be used as security for 70 per cent of the debt, and guarantees from other companies can only be used as security for the remaining 30 per cent.

The findings from analysis of interview data suggest that there might be a number of reasons to explain the existence of a negative relationship between asset structure and leverage for sole-trading enterprises, where the opposite is the case for limited liability enterprises. It was established that smaller sole-trading enterprises tended to make greater use of other forms of collateral including personal assets,

personal guarantees and inter-firm guarantees when borrowing from the bank than limited liability enterprises, which tend to use the fixed assets of the enterprises as security.

5.5.6 Informal financing

When asked whether their firms use informal financing the majority of respondents revealed that their firms made limited use of informal financing mechanisms at the present time. However, a number of respondents indicated that their firms had used informal sources of finance in the early stages of their development.

A significant proportion of respondents (around 40 per cent) confirmed that they had borrowed money from friends and family in the early stages of business development. This can be evidenced by the following statements:

RA: Our company used informal financing from individuals in its early stages, but doesn't use it today.

RN: We borrowed money from friends and relatives in the past.

A small number of respondents indicated that they still continued to finance their business through borrowing informally from friends and relatives. These respondents were amongst the smallest enterprises surveyed and predominantly sole-traders. The CEO of one of the smallest firms interviewed, revealed that his firm continued to borrow from relatives and friends as they had difficulties accessing bank financing. He emphasised that this method of financing was more flexible and sometimes even cheaper than bank financing

RL: In the short-term, we pay them back when they need us to...we should pay interest to them but it is lower than that of the banks sometimes.

The CEO of another sole-trading enterprise indicated his firm's reliance on informal sources of

financing from friends and family.

RU: I use some of my own money and borrow some money informally from my friends and classmates. We don't use any bank finance...The main source of finance is personal. Sometimes I borrow money from my previous leaders who trust me.

Later on in the interview he stressed even though the interest rate when borrowing money informally was higher than that of the bank interest rate and his relationship with the bank was good, he still preferred informal financing over formal bank financing. In explaining this preference he remarked:

RU: Bank finance is inconvenient. So many procedures should be handled and you also need to guarantee your debts.

The following comments made by a government official indicate that the use of informal financing was common amongst firms in the early stages of their development but not appropriate for older and larger firms:

RY: Talking about borrowing from relatives and friends, this is quite common, especially during the beginning stage of enterprise development, since it is hard for SMEs to get adequate money from banks at that time...This kind of borrowing cannot meet the capital requirements for a SME when it enters the development stage. It has to finance through other channels.

Although the use of informal financing via family and social networks was relatively widespread very few respondents admitted borrowing informally from underground financing institutions such as guarantee companies and credit networks. One respondent commented that his firm had used such types of informal financing, but only as a last resort, in times of financial hardship.

RE: If you really have difficulties in formal financing, you have no choice but to turn to informal channels. There was a time when we were in great difficulties as we had to repay our

bank loans. We borrowed 0.2 million informally at an interest rate of 5 per cent for three days.

According to a government official the use of underground financing mechanisms by SMEs is not widespread. He commented that firms only resort to this type of financing in the very short-term.

RY: In most cases, SMEs borrow informally for short-term needs. For instance, if a SME has to repay millions of bank loan at the end of this month, it may borrow informally to meet that obligation and pay it back immediately after it receives the renewed bank loan the next month.

One respondent indicated that the use of informal financing is less common today than it was in the past due to the increased ability of enterprises to access formal financing mechanisms:

RC: Informal financing is less important today, because the procedure of financing is handled more and more regularly.

The branch manager of a state-owned bank suggested that informal financing was widely used in underdeveloped parts of the country, but only to firms shut out of formal financing.

RZ: Although informal financing is quite common nowadays, it is still only popular in less developed areas and among companies that cannot borrow money from banks. Companies with good performance will always choose bank financing over informal financing.

A government official indicated that the phenomenon of informal financing was more popular in some areas of his province than others. He added that despite the use of informal financing most firms rely on formal financing mechanisms.

RY: The situation varies among different cities. The phenomenon is more severe in Wenzhou and Taizhou because most of SMEs there are private enterprises while SMEs here are transformed from collective and township enterprises, which are usually larger than private enterprises in scale. Hence, underground markets account for a smaller percentage of total

finance in Shangyu, Shaoxing, and Ningbo. The main financing channels are still formal.

The findings from the interview data seem to suggest the limited reliance of firms on informal financing mechanisms, especially by the limited liability enterprises in the sample. These findings seem to contradict the results of previous empirical studies which estimate that around 30 per cent of SME financing in the East of China came from informal sources (OECD, 2005). However, the findings indicate that in the initial stages of enterprise development informal sources of financing, especially those which involve borrowing from family and social networks, were important to a number of enterprises in the sample.

5.5.7 Financing via employee loans

A small number of firms borrow directly from their employees to finance their business activities. This allowed them to obtain capital in the short-term with relatively ease and flexibility. The following comment illustrates the importance of this financing source to one of the firms in our sample:

RE: We use internal financing from employees sometimes by providing a higher interest rate than that of banks...Currently we use 19 million RMB of bank loans and 4 million RMB of internal funds.

5.5.8 Changes in the financing behaviour of SMEs

When asked whether the financing behaviour of their businesses had changed over the last ten years respondents gave varied answers. A number of respondents indicated that they now borrow money from the bank, whereas in the past they relied mainly on informal sources of financing.

RD: I would borrow money from my friends and pay them back. However, we no longer use this informal financing now.

RL: In the beginning we used our own money and borrowed some from friends and relatives. Today we use bank financing and reinvest accumulated profits.

RN: In the past we just needed a small amount of money, so we always borrowed from individuals. Now we need several million in capital, so we borrow from the bank.

RV: At first we used our own money or borrowed from relatives...now, we use only bank financing.

One respondent highlighted how important bank financing had become to his business over the last decade.

RH: Only 30 per cent of our funds came from banks ten years ago. Now its 90 per cent.

The following comments from key respondents suggest that the increased competition in the banking sector has led to greater access to finance for SMEs:

RC: We mostly used informal financing, and borrowed money from friends and enterprises with which we had a good relationship. Besides we had a certain amount of bank financing but not too much...bank financing is easier than before, mainly because there were fewer banks, all owned by the state in the past, but there are many commercial banks nowadays.

RG: We only used the four big state-owned banks in the past, but now we can choose to borrow money from joint-venture commercial banks.

The interview data suggests that the liberalisation of the financial sector in China has made it easier for SMEs to borrow from banks than was the case in the past. This seems to contradict the findings of recent work that suggest that private SMEs continue to face huge constraints in accessing financing from the banking sector (Farrell et al., 2006).

5.5.9 Network ties and SME financing

The previous literature suggests that the network ties of the SME owner/manager may provide them

with greater ability to access external sources of financing (Uzzi, 1999; Nguyen and Ramachandran, 2006). In the following sections the importance to firms of building strong relationships with other firms, political officials and bank officials will be examined.

5.5.10 Financing via business networks

When asked how important other firms were to the financing of their businesses a number of respondents illustrated that the provision of loans and financial guarantees from other firms within their business network had a significant role to play in their business financing.

RD: In the past...I preferred to borrow from other companies because I had a good relationship with them based on long-term trust.

RF: Keeping a good relationship with other firms, especially with suppliers and customers is very important. Sometimes, we borrow from each other or guarantee for each other.

RN: (The relationship with other firms) is important to us, an example is the inter-firm guarantee... I will use it if we don't have enough assets as security for our debts.

Financing via business networks was especially important to the short-term financing needs of some firms, especially when paying back loans to the bank. A number of firms sought inter-firm financing as a stop-gap measure during the process of renewing loan agreements with their banks. This can be illustrated by the following comments:

RO: We can borrow from them (other firms) when our bank loan is due but we don't have the necessary capital to pay on time.

RP: We help each other. I borrow money from them (other firms) when my debts become due.

One respondent highlighted in greater detail the critical role played by financing via inter-firm

networks to the survival of his business.

RI: Occasionally for some small amounts, we will lend or borrow between enterprises...when we run enterprises, we work as a group of enterprises and we guarantee each others' loans. Therefore none of us will go out of business.

Another respondent from the real estate industry highlighted the importance of inter-firm networks to the financing of construction projects in China:

RH: Sometimes we borrow from other companies...the relationship with our partners is quite important, especially when we do a big project together...after the project has started, we borrow from banks jointly in the form of project debt.

The analysis of interview data suggests that inter-firm financing plays a significant but somewhat limited role in SME financing for enterprises in our sample. A number of respondents highlighted the importance of relationships with other firms to the financing of their business. Several firms revealed they had used inter-firm guarantees when they had insufficient assets to pledge as security. Other respondents indicated they had borrowed money from other firms in their business network in times of financial difficulties.

5.5.11 Trade credit

When asked how important trade credit was to the financing of their businesses respondents gave a wide range of answers. The importance of trade credit seemed to vary quite considerably between firms in different industries. The importance of trade credit to several of the firms can be seen from the following comments.

RA: We have large amount of trade credit with our suppliers and our customers with us.

RV: Seventy or eighty percent of my suppliers usually give us two to three months to clear the payment...it's a buyers' market now. So trade credit is a kind of marketing.

RX: In our company, for distributors, we ask for prepayment. Goods will be delivered one week after the payment. We settle with our suppliers one month after delivery, usually 30 or 45 days.

One of the respondents interviewed pointed out his firm relied exclusively on trade credit for external financing.

RB: As we have a good reputation, we get trade credit when we purchase from Zhenghai Refining and Chemical Co and BP (our main suppliers). We don't need to pay the first 1.5 million RMB on all business with BP. They provide us with a similar amount of trade credit all year round.

Another respondent highlighted the importance of trade credit from his largest customer, a UK firm.

RE: This really helps us in financing. We may experience great difficulties if we didn't have a customer like the UK company... trade credit is important.

In direct contrast to the above evidence a one respondent commented that trade credit was not important to the financing of his business.

RO: We have no accounts payable. We pay in advance when we purchase equipment and material because we hope to get them at the lowest price.

Other respondents indicated that their firms only relied on trade credit to finance their business when in serious financial difficulties:

RK: This is a rare situation (use of trade credit), but sometimes it happens. For example, it happens when the...company has cash flow problems.

RQ: Sometimes we have a problem with working capital, and we need to be paid in advance, but it happens infrequently.

The above statements indicate that trade credit is a significant source of financing for a significant number of the enterprises in our sample. This confirms the findings of previous studies in the Chinese context which suggests that trade credit is used by firms who are shut out of the formal credit markets (Cull et al., 2007; Ge and Qiu, 2007). The results indicate that without trade credit, financing difficulties may impact on the ability of a small but significant number of firms to develop and prosper.

5.5.12 Political relationships and financing

When asked how important relationships with government officials were to the financing of their businesses the respondents provided a variety of answers. Several respondents emphasized the importance of the government relationships to firm success in China.

RH: I think it's crucial to maintain a good relationship with the government in China...not only banks but all the resources belong to the government...we need to pay great attention to our relationship with government.

RI: When running companies in China you cannot ignore the relationship with government. Basically the government and enterprises are not autonomous... it (the relationship with government) is important to our business.

It was the view of a significant number of respondents that government support is an influential factor in determining the ability of SMEs to access financing from the banking sector. The following comments made by a CEO of a sole-trading enterprise suggest that relationships with government officials may lead to improved access to bank financing for SMEs:

RD: You must have a good relationship with some officials in China. For example, a friend of mine who needed bank financing but had some difficulty asked for my help in introducing

him to an official. In China, relationships are more important than reason and law. You can know more people through officials.

Two respondents highlighted the importance of relationships with government officials in gaining access to financing to support projects their firms were involved in.

RA: When we have a project where we need to raise extra money the relationship with government is important.

RC: We are a construction company, so lots of procedures must be completed such as applying for a builder's licence and a builder's presale permit. So we should keep a good relationship with the government. It allows us to deal with the procedures quicker.

Another respondent indicated the support provided by government officials was crucial when applying for a loan from the bank.

RX: At first, I asked for a loan of 50,000 RMB. At that time, they (the bank) did not know much about us and refused to lend, even though 50,000 RMB was not a large amount. Later we managed to borrow it with the guarantee of an officer in the town government.

He then went on to reveal the generous financial support the local government provides for firms in the agricultural sector.

RX: Each year, the government of the city awards us 400,000 to 500,000 RMB, the government of the town awards us 70,000 to 80,000 RMB. Besides, the Technology Bureau awards us and other projects in the province. The government offers strong support for our company. The total amount of awards is at least 600,000 to 700,000 RMB each year. We get money for nothing. We take it and never need to pay back.

He also outlined the support national government provided SMEs during the financial crisis. He revealed the national government had reduced interest rates, encouraged greater communication between private firms and banks, encouraged banks to issue more loans and asked banks to defer repayment of loans for firms in financial trouble.

The CEO of one firm revealed he was the secretary of the local Communist party committee. When asked whether political participation helped to improve the ability of his firm to access external financing he forwarded the following comments:

RG: Yes, it helps you to a certain degree. We have a good social position.

Several respondents highlighted the vital role played by government officials in enabling firms to build effective relationships (*guanxi*) with their banks.

RI: Sometimes when you have some projects, the government will help you to negotiate with the banks.

RP: The government has given us great support to communicate with the bank. In the early stages of development the government helped us a lot...private companies cannot survive without the help of government...the government gives us some help in relation to financing. If we don't know the bank officials, they can provide us with an introduction.

RW: If a company has favourable *guanxi* with government, it can also build effective *guanxi* with banks. Within the interaction between companies and banks, it is possible that government reinforces *guanxi* between the two. From this perspective... companies should put government relationships first, and relationships with banks second. If government is not considered initially, your *guanxi* with banks may not be very effective. Putting government first and banks second, means that their support can be effective.

RX: The government functions as a bridge between banks and enterprises. It builds the bridge and introduces one party to the other. Generally, presidents of banks should have good *guanxi* with government. They need the help of government.

RZ: The government...has a role to play in establishing some platform to help banks and firms to communicate with each other.

The above comments indicate that the government may have an important role to play in bringing bank officials and firms together. In this way government support of individual firms may lead to greater access to bank financing for SMEs.

One respondent explained in some detail the role played by government officials in facilitating lending from banks to SMEs.

RX: I once wanted to build *guanxi* with...CITIC Bank. I did not know anyone there, as I had no *guanxi* with the president or anyone else. At that time, Secretary Hong, bridged the gap. In March last year, he organised a seminar between banks and enterprises. He invited presidents, vice presidents and client managers of banks, as well as the outstanding enterprises, to the government offices. The enterprises were asked about the difficulties they faced and whether they were short of money. We had the opportunity to consult with and meet the banks. Then after meeting the banks they would evaluate the conditions of the company. As these are very good companies, banks would provide a loan if the company had suitable property; if not, the business itself could be a guarantee.

Another respondent revealed that the local government in his area had provided direct financing to a local commercial bank in order to support lending to SMEs.

RE: Shangyu has put 50 million RMB in Shaoxing Commercial bank who promised to lend 0.5 billion RMB to SMEs. The 50 million is used as a risk fund and kept by the bank. The government gave a list of SMEs or industries that have priority in borrowing money.

Despite evidence to suggest that relationships with government officials continue to play an important role in allowing firms to access bank financing, a number of respondents suggested that such relationships are becoming less and less important to the financing of SMEs. The following comments

indicate that the government plays more of a limited role in the financing of private SMEs than was the case in the past.

RB: The role of government today (in financing) is less and less as banks have the responsibility to provide financing themselves.

RE: Generally, local government... has little influence on banks nowadays...I think it plays a less and less important role in financing...Banks have transformed their ownership. They appoint the directors themselves.

RK: Generally speaking, the government is not involved in the financing of private enterprises. Only for some big projects, the government will coordinate financing...Most of the enterprises get financing based on their own credit and their relationship with banks, so government participation is not normal.

RQ: The government acts as a supporter, but provides no practical help. Nowadays, banks consider more carefully than you think. If the company is not good they will not lend you money.

The comments of a bank official seemed to confirm these viewpoints. When asked whether the government played a role in the lending process she emphasised that the government had no direct influence over individual decisions to grant credit.

RZ: Banks are enterprises now and the management system is vertical which means we are not affected by local government...the government does not directly influence our decision whether or not to lend.

Some respondents said the relationship with government had no role to play in the financing of their businesses. When asked how important the relationship was with government to their business financing the following answers were provided:

RL: It is not so important, the government doesn't care about us.

RN: It is not so important for small companies. Small companies mainly rely on the support of banks and their productive ability.

RO: It is not so important, we mainly depend on the strengths of our company.

These responses seem to suggest that the enterprise performance is more important than relationships with government in determining which SMEs get access to credit from the banking sector.

Interview data suggests the government has little direct influence over deciding which enterprises would get access to credit from the banking sector. It is apparent that the decision to grant credit is taken at the bank level and is generally dependent on the financial performance of the individual enterprise. The analysis of interview data clearly demonstrated that government influence over credit allocation at a micro-economic level is much more limited than was the case in the past. This confirms the findings of previous research which indicate the role played by social relationships (*guanxi*) in financing is declining in importance (Fock and Woo, 1998; Guthrie, 1998; Tsang, 1999; Hutchings and Murray, 2002; So and Walker, 2006).

Despite the fact that the influence of government officials over credit allocation was decreasing, it was clear from the interviews that the government still had an important role to play in the financing of SMEs. A number of enterprises in the sample highlighted the importance of their relationships with government officials to the financing of their enterprises. Government officials, in many cases, act as a bridge between enterprises and banks.

5.5.13 Bank/firm relationships and financing

The respondents were asked how important the relationship with their banks was to the financing of their businesses. A number of respondents indicated that a strong relationship with their bank increased their ability to access adequate financing. Typical comments provided highlight the importance of the bank/firm relationship in SME financing:

RW: If we want to develop rapidly, by leaps and bounds, then it is definitely not sufficient to

rely solely on internal sources of finance. If you want to develop, you will need the effective help of banks... (My company) is considering some issues, such as how to develop, and how to establish our own original business lines. These business lines cannot be successful without the credit relationship and the comprehensive support from banks. This is unavoidable. We cannot do it without banks.

Several respondents suggested what firms might do build effective relationships with their banks. The importance of communicating with the banks was highlighted in a number of interviews.

RN: You should market your brand and organizational culture to the bank. Let banks trust you and keep in touch with them. Sometimes you need to invite them to come to your company to see its real situation and treat them as friends.

RX: We should try to know more about each other, and keep communicating. If you have any concerns, you should discuss with banks in advance...if you have the intention to invest or to do other things, you should communicate in time and banks will support you. Otherwise when you are short of money and in a bad situation, and you ask for loans at that time, banks may not be willing to issue the loans. Communication should be conducted in advance.

A significant number of respondents forwarded the opinion that the most important criteria for the bank when deciding whether or not to lend money to a firm was the financial position of the firm and not simply whether the firm had a good relationship with bank officials. Several respondents suggested that firm reputation and repayment history were the main criteria used by banks when deciding whether or not to grant credit. When asked how their firms built a good relationship with their banks respondents forwarded the following comments:

RP: Reputation and prompt payment of the loan are extremely important. We just need to pay our interest into the bank account when the debt becomes due, or we can pay in cash the following day. Actually, the banks trust you when they lend you money, so you do not need to do anything else to build a relationship with them.

RQ: We believe the good relationship between the bank and our company is built on good reputation and creditability.

A branch manager of a state-owned bank when asked whether a firm may find it easier to access bank financing if they have a personal relationship with bank officials made the following comments:

RZ: Such circumstances do exist. However, the major criterion is the performance of the applicant, especially the financial performance. Companies that have personal relationships with us may enjoy priority if they measure up. But if they fail in meeting the basic requirements, I don't think that personal relationship work.

A number of the respondents revealed how they were able to build a good relationship with the bank after being introduced by a third party intermediary. The intermediary played a critical role in vouching for the reputation and creditworthiness of the business to the bank. In some cases the intermediary was a government official, in other cases it was a customer or supplier with which the firm had a strong business relationship. The following comments highlight the role of intermediaries in the development of bank/firm relationships:

RT: Generally we build a relationship with the bank after an introduction from a third party. The bank officials then visit our company to see whether the company is profitable.

RP: The government has given us great support to communicate with the bank...if we don't know the bank officials, they can provide us with an introduction.

It was clear from the interviews that the bank/firm relationship was an important factor in determining its ability to access debt financing from the bank. This is in line with previous research in the developing economy context which found a positive relationship between the importance placed by firms on building relationships with banks and their leverage level (Nguyen and Ramachandran, 2006).

5.5.14 Control aversion of owner/manager and financing

One reason commonly given for the reluctance of SMEs to rely on external sources of finance is the desire of owner/managers to maintain independence and control over the decision-making in their enterprise (Harvey and Evans, 1995; Hutchinson, 1995). When asked whether the majority shareholder would be willing to give up control of part of the company in return for investment from an outside partner respondents provided mixed answers.

Interviews with several respondents suggest that control-averse owner/managers are less likely to accept external financing, especially those that involve a sale of equity to outsiders.

When asked whether the owners of their firms would be willing to give up a stake of the business in return for outside investment to finance growth respondents provided the following answers:

RT: I don't think they (the owners) will do this.

RC: The owners don't need to do this, as they want to keep absolute control in the family.

RD: In the past we have had offers (from outside partners) but we have never accepted them.

RU: No, I don't want it.

A significant proportion of respondents indicated their firms' willingness to take on new shareholders if it meant increased financing for their business. When asked if they would be willing to sell a part of their business to an outside investor in return for quicker expansion of their business respondents provided the following answers:

RG: We are willing to (seek new shareholders). I believe this is the only way our company can become stronger and bigger.

RI: I will give up a proportion of the shares now to a prospective partner.

RR: I am willing to (involve new shareholders) if they have high technology to give to the business.

RV: Yes, absolutely, if there is a chance.

RW: You asked about the possibility of forming joint ventures with big companies, I would be very glad to do so... cooperation or a joint venture with big companies, a large investment or public offering...all of these options will be taken into consideration.

RX: Yes, it will be OK.

On respondent indicated he was actively seeking cooperation with outside partners in order to gain financing for his business:

RE: We are focusing on the cooperation with the UK company, hopefully we will become a joint venture. If we want to maximise our profits, our firms should join together.

Another respondent revealed he was in negotiations with a foreign venture capital firm to sell a stake in his firm in return for equity investment. He pointed out the investment by a venture capital firm would be a prelude to listed on an overseas stock exchange.

RK: If it benefits both sides then that (the deal) would be agreed.

The answers provided by key respondents in the sample suggest that the owner/managers of SMEs are not as control averse as has been implied from previous empirical work (Harvey and Evans, 1995; Hutchinson, 1995; Berger and Udell, 1998). The lack of control aversion was most obvious in growth-oriented firms. For these firms, their owner/managers recognised the importance of attracting external finance to fulfil their growth potential and ensure their long-term survival.

Answers provided by a number of key respondents indicate that SME owner/managers who exhibit control aversion are less likely to rely on external sources of debt to finance their business activities. This supports the findings of previous empirical work (Harvey and Evans, 1995; Hutchinson, 1995) suggesting a negative relationship between control aversion and use of external financing.

5.5.15 Strategic objectives and financing

There is a body of previous literature to suggest that the strategic objectives of SMEs impact on how they finance their business activities (Barton and Matthews, 1989; Cressy, 1995; Chittenden et al., 1996; Jordan et al., 1998; Michaelas et al., 1999; Berggren et al., 2000; Romano et al., 2000; Cassar, 2004). Respondents were asked to outline the major strategic objectives of their business and how these impact on the financing of their enterprise.

A number of respondents revealed that the main strategic objective of their business was growth. The analysis of interview data indicated that firms with significant growth intentions tended to rely to a greater extent on external financing. The following comments provide evidence of such a link:

RN: We must use bank financing because the accumulation of internal profits is too slow...we want to be number one in our industry in China.

RK: As we increase the scale of the company and start new projects, we have increased the amount of bank financing...we will try to increase our sales...and be listed within five years.

In contrast, firms with limited growth intentions relied to a lesser extent on external sources of debt financing, content to finance their operations internally through reinvestment of profits. Several respondents with limited growth intentions pointed out that their firms had limited use of debt in their capital structure.

RD- We just want to stay roughly the same size...we don't want to have too much debt and just want to develop steadily...generally I use internal financing.

RR: I don't want to enlarge my business...now I have plenty of capital and don't need external financing any more.

RS: I just want to keep the business at its present scale and don't consider further development...We don't need any external financing.

These results support the findings of previous empirical work, which establishes a positive link between growth intentions and leverage (Cressy, 1995; Michaelas et al., 1999; Berggren et al., 2000). The findings suggest that firms with growth intentions will place greater emphasis on seeking external sources of finance, especially bank financing, when internal financing is inadequate and work harder to build up strong relationships with outside financiers.

A summary of the interview findings are provided in Table 5.2.

Table 5.2: Summary of interview findings

Firm/ Respondent	Importance of Bank Financing	Use of Long-Term Loans	Importance of Informal Financing	Importance of Inter-Firm Relationships to Financing	Importance of Government Relationships to Financing	Importance of Internal Financing via Profits	Control Aversion	Strategic Objectives
A	High	Yes, but minimal	Low today, high in early stages of growth	High, uses significant trade credit	Medium, important in financing of large projects	Low	Low	Limited growth
B	Low	No	Low	High, uses significant trade credit	Low	High	High	No clear plan
C	High	Yes	Low today, high in early stages of growth	Low	Medium, enables things to be done quicker	High	High	No clear plan
D	Medium	No	Low today, high in early stages of growth	Low today, previously borrowed from other companies	Low	High	High	No intention to grow
E	High	No	Low, but used in times of financial difficulty	High, uses significant trade credit	Low	High (also borrows from employees)	Low	Significant growth
F	High	Yes	Low	Medium	Low	Low	N/A	Survival, no intention to grow
G	High	No	Low	N/A	Medium, helps improve social reputation	Medium	Low	Stable growth
H	High	Yes	Low	High, borrow together with other firms	High	N/A	Low	Stable growth
I	High	No	Low today, high in early stages	Medium, use of inter-firm	Medium, helps negotiate with	N/A	Low	Stable growth

				of growth	guarantees	banks for certain projects			
J	High	No		Low	Medium, use of trade credit	N/A	N/A	Low	Significant growth
K	High	Yes		Low	Medium, use of inter-firm guarantees	Low	High	Low	Significant growth
L	High	No		Medium, borrow from friends and relatives	Low	Low	High	N/A	No intention to grow
M	High	No		Low	Medium, use of inter-firm guarantees	Low	N/A	N/A	No clear plan
N	High	No		Low today, high in early stages of growth	Medium, use of trade credit and inter-firm guarantees	Low	Medium	Medium	Stable growth
O	High	No		Low	Medium, use of inter-firm loans	Low	High	Medium	Stable growth and diversification
P	High	No		Medium, borrows from friends	Medium, use of inter-firm guarantees	Medium, provide introduction to the bank	High	High	Stable growth and diversification
Q	High	No		Low	Medium, use of inter-firm guarantees and trade credit	Low, provides no practical help	High	Medium	No clear plan
R	Low	No		Low today, high in early stages of growth	Low	N/A	High	Low	No intention to grow
S	Low	No		Low	Low	N/A	High	N/A	No intention to grow
T	High	No		Low	Medium, use of trade credit	Medium	High	High	Stable growth
U	Low	No		High	Low	Low	N/A	High	Stable growth

V	High	No	Low today, high in early stages of growth	Medium, use of inter-firm guarantees and trade credit	Low	N/A	Low	Stable growth
W	High	No	Low	Low	Medium, helps build relationship with the bank	High	Low	Stable growth
X	High	No	Low today, borrowed from relatives in the past	Medium, use of trade credit	Medium, provided guarantee and subsidies	N/A	Low	Significant growth

5.6 Summary of Key Findings

The findings of this chapter provide further support for the pecking-order theory indicating that firms typically finance via internal sources before seeking external sources of finance. Bank financing was used by a large proportion of enterprises, but most lending was done in the short-term due to risk aversion on the part of the lending institutions. This chapter also helped us to understand why there was a negative relationship between asset structure and capital structure for sole-trading enterprises in the previous chapter. Sole-traders made less use of asset-based financing than limited liability firms, relying to a greater extent on trade credit and informal financing. When lending from the bank they typically use alternative forms of collateral such as personal guarantees and personal assets in addition to the fixed assets of the firm.

Limited reliance on informal financing mechanisms, especially by limited liability enterprises, was also evident from data analysis. Firms only borrowed informally via the social and familial networks of the owner/manager in the early stages of their growth. However, trade credit and financing via business networks continue to play an important role in business financing for many enterprises.

As regards the role of government in SME financing, data analysis revealed that the government authorities have little direct influence over the granting of credit to private SMEs by financial institutions. Lending decisions are taken by bank officials and tend to be dependent on the financial performance of the individual enterprise. However, government officials play an important role in acting as a bridge between private SMEs and financial institutions. They are able to vouch for the creditworthiness of the individual enterprise and provide introductions to bank executives, smoothing the process of seeking bank financing.

Finally the control aversion of SMEs owner/managers was an important factor influencing their financing decisions. Control aversion on the part of owner/managers seemed to have a negative influence on their willingness to seek external financing.

5.7 Policy and Managerial Implications

The research findings of this chapter provide some important implications for policy makers in China looking to support the development of SMEs. They suggest that the government can play an important role in acting as a bridge between SMEs and financial institutions to facilitate greater lending to SMEs in their local area. Government should consider developing forums in which bank officials and SME executives are provided with an opportunity to meet each other in an informal setting. This should improve the ability of SMEs to build social capital and strengthen their corporate reputation with financial institutions. This is especially relevant for sole-trading enterprises, characterised by high levels of asymmetric information. Government officials might also work proactively to encourage financial institutions to give sole-trading enterprises improved access to financing.

The research findings also have implications for managers. They should consider working hard to build networks ties with other economic actors as an important part of their business strategy. Analysis of the interview data indicates that firms with strong relationships with bank officials, government officials and executives at other firms find it easier to borrow formally from financial institutions, as well as gaining access to other scarce resources. There are a variety of ways in which firms can build network ties. Firstly, owner/managers might consider joining a business association in which they can develop relationships with other entrepreneurs and government officers. They might also consider seeking membership of the Communist party in order to increase legitimacy and support. SMEs might also consider investing time and effort in developing close working relationships with financial institutions in order to improve access to debt financing. They should recognise the need for frequent communication and the importance of disclosing financial information on a regular basis in order to build up trust and reduce asymmetric information between themselves and their lenders.

However, the findings suggest that network ties alone do not guarantee access to external financing. The interview data revealed that financial performance of the firm is the main criteria used by financial institutions when deciding whether or not to grant credit to the SME. Firms must also take great care not to become over-indebted to entities with which they have social relationships. The network ties possessed by a firm might be a liability if it is unable to reciprocate favours provided by another

individual or organisation within their social network (Gu et al., 2008).

5.8 Limitations and Suggestions for Future Research

As with the previous chapter, the main limitation that results from this chapter concerns the extent to which its findings can be generalised to other firms within Zhejiang Province and across China. Interviews with key respondents from SMEs in different geographical locations could be undertaken to assess the robustness of the findings. Such replication efforts could be easily undertaken with sufficient time and access to participants. In the next chapter the findings from this chapter will be used to develop and test hypotheses through the distribution of a survey questionnaire. This will reveal whether the interview findings are generalisable to the wider population.

Another limitation of this chapter is the potential bias towards successful firms in the sample. As intermediaries were used to introduce key respondents it is suspected that highly profitable and well performing firms might have been over represented in the sample and that firms who are facing financial difficulties might have been less interested in talking to the research team.

5.9 Conclusion

This chapter identified and analysed the factors which influence the capital structure decisions of SMEs through semi-structured interviews with key respondents from 24 SMEs from one area of Zhejiang Province. Additional interviews were also conducted with a government official responsible for promoting SME development and a bank official from the same area to gain a deeper understanding of the factors which impact on how SMEs are financed.

In the first section of this chapter research questions were developed and the methodology presented. The process of data collection and data analysis was then outlined. Next the results were presented and discussion undertaken. Finally, the limitations of this chapter were examined and conclusions made.

In the following chapter a theoretical model will be developed based on the discussion of findings from this chapter and the previous literature. The model will then be tested by analysing data collected through the distribution of a survey questionnaire.

CHAPTER 6: RECONCEPTUALISING THE CAPITAL STRUCTURE OF SMES: TOWARDS AN ALTERNATIVE THEORETICAL FRAMEWORK

6.1 Introduction and Theoretical Background

This chapter investigates the extent to which factors, other than those posited by financial theories of capital structure, can assist in explaining the capital structure decisions of Chinese SMEs. In the previous chapter semi-structured interviews were utilised to help explain the factors which influence their financing decisions. Its findings indicated that financial theories alone might not fully explain how Chinese SMEs are financed. On the basis of these findings and the literature presented in Chapter 3 a theoretical model, which examines the relative importance of managerial factors on capital structure decision making, is developed and empirically tested through the distribution of a survey questionnaire. Specifically, it examines the relative influence of the business objectives, psychology, human capital and network ties of owner/managers on the financing decisions of firms in the SME sector, and helps in the development of a theoretical framework to explain capital structure decision making in the following chapter.

In Section 2 of this chapter the hypotheses are developed. Section 3 outlines in detail the methodology of this research. In Section 4 the empirical results are presented. The implications of the research findings are discussed in Section 5 and in Section 6 their managerial and policy implications are discussed. In Section 7 the research limitations and suggestions for future research are presented and in Section 8 a conclusion is made.

6.2 Hypothesis Development

6.2.1 Growth intentions

Analysis of interview data in the previous chapter suggests that the growth intentions of owner/managers may impact on how SMEs are financed. Several of the respondents who intended to rapidly expand their business operations revealed that they were more reliant on external financing than those with limited or no intentions to grow in size.

There has been limited examination of the impact of growth intentions of owner/managers on the capital structure of firms in the developing economy context. Previous research on SMEs in developing economies demonstrates that actual firm growth is a determinant of leverage (Nguyen and Ramachandran, 2006). However, recent work on larger listed firms in China finds no evidence of a relationship between firm growth and leverage (Chen, 2004; Chen and Strange, 2005).

Only one study at present has investigated whether the growth intentions of the owner/manager impact on the capital structure of SMEs (Cassar, 2004). Cassar (2004) finds a significant relationship between the growth intentions of the owner/manager and bank financing, but no relationship with total and long-term leverage. He argues that firms with rapid growth intentions have a higher proportion of bank financing in their capital structure as these firms have a greater incentive to develop close relationships with their banks as early as possible in order to access adequate sources of financing in the future.

It is possible to suggest that the growth intentions of the owner/manager will be an important determinant of capital structure in the Chinese SME context leading to the following hypotheses:

Hypothesis 1a. The growth intentions of the owner/manager are positively related to leverage

Hypothesis 1b. The growth intentions of the owner/manager are positively related to short-term leverage

Hypothesis 1c. The growth intentions of the owner/manager are positively related to long-term leverage

Hypothesis 1d. The growth intentions of the owner/manager are positively related to bank financing

6.2.2 Profit maximisation objectives in the short-term

As of present, limited empirical work has been conducted on how the intention to maximise profits on the part of the owner/manager impacts on the financing decisions of SMEs. It is suspected that firms with intentions to maximise profits in the short-term will seek higher levels of short-term financing, to take advantage of economic opportunities that present themselves. Such firms however should therefore be less reliant on long-term financing in their capital structure. This leads to the following hypotheses:

Hypothesis 2a. The intention to maximise profits on the part of the owner/manager is positively related to leverage

Hypothesis 2b. The intention to maximise profits on the part of the owner/manager is positively related to short-term leverage

Hypothesis 2c. The intention to maximise profits on the part of the owner/manager is negatively related to long-term leverage

Hypothesis 2d. The intention to maximise profits on the part of the owner/manager is positively related to bank financing

6.2.3 Control aversion

Analysis of the interview data in the previous chapter provided some support for a negative relationship between the control aversion exhibited by owner/managers and their willingness to use debt in their capital structure. Respondents who were more control averse typically indicated their intention to limit the use of external financing by their firms. This is in line with the findings of empirical studies in the context of Western economies which revealed that SME owner/managers typically prefer to rely on internal sources of funds, for the fear that reliance on external sources of finance might lead to a loss in control over the firm and limit their power to make decisions independently of their financiers (Harvey and Evans, 1995; Hutchinson, 1995; Berger and Udell, 1998). In China, the control aversion of owner/managers has been cited as one reason for the reluctance of SMEs to seek external financing for their business (Pukthuanthong and Walker, 2007). Indeed, insights gained from semi-structured interviews in the previous chapter seem to confirm such assertions, leading to the following hypotheses:

Hypothesis 3a. The control aversion of the owner/manager is negatively related to leverage

Hypothesis 3b. The control aversion of the owner/manager is negatively related to short-term leverage

Hypothesis 3c. The control aversion of the owner/manager is negatively related to long-term leverage

Hypothesis 3d. The control aversion of the owner/manager is negatively related to bank financing

6.2.4 Risk propensity

The risk-taking propensity of Chinese individuals has been found to be a major factor that influences their propensity to engage in entrepreneurial activity (Tan, 2001). Despite this there has been limited work investigating how this influences the strategic orientation of Chinese SMEs, especially as regards financing. Barton and Matthews (1989) and Matthews et al. (1994) propose that the risk propensity of owner/managers will influence the amount of debt they are willing to consider in the SMEs capital structure. They argue that in cases where the owner/manager pledges their personal assets as security when they borrow money from the bank, their risk propensity will have an even greater bearing on the amount of debt the business is willing to take on.

Although analysis of data obtained from semi-structured interviews in the previous chapter failed to elicit much on the link between risk aversion and capital structure it is suspected that the risk orientation of the owner/manager will positively impact on the amount of debt they are willing to take on to finance the activities of their business. This leads to the following hypotheses:

Hypothesis 4a. The risk propensity of the owner/manager is positively related to leverage

Hypothesis 4b. The risk propensity of the owner/manager is positively related to short-term leverage

Hypothesis 4c. The risk propensity of the owner/manager is positively related to long-term leverage

Hypothesis 4d. The risk propensity of the owner/manager is positively related to bank financing

6.2.5 Educational level of the owner/manager

Theoretically the educational achievements of the owner/manager should provide lenders with a signal as to the quality of the enterprises' human capital and improve their ability to access external financing. Despite this empirical work looking at the relationship between the education level of the SME owner/manager and the firm's financing behaviour does not produce consistent results (Bates, 1990; Scherr et al., 1994; Coleman and Cohn, 2000; Cassar, 2004, Bell and Vos, 2009). Bates (1990) and Coleman and Cohn (2000) find that SMEs whose owner/managers are more educated have more debt in their capital structure than their less educated counterparts. However, empirical work by Scherr et al. (2003), Cassar (2004) and Bell and Vos (2009) find conflicting evidence. Both Scherr et al. (2003) and

Bell and Vos (2009) find a strong negative relationship between the education level of the owner/manager and use of external financing. Bell and Vos (2009) argue that this may result from the fact that more educated owner/managers are more financially content and show greater understanding of what is valuable to them in the long-term. Such individuals gain higher utility from financial freedom and are more risk averse when making decisions. In contrast Cassar (2004) finds no evidence of a relationship between the educational level of the SME owner/manager and use of bank financing. Recent empirical work on Chinese SMEs by Zhang (2008) reveals that firms whose owner/managers have a higher education are more likely to rely on formal financing mechanisms than those who do not leading to the following hypotheses:

Hypothesis 5a. The educational level of the owner/manager is positively related to leverage

Hypothesis 5b. The educational level of the owner/manager is positively related to short-term leverage

Hypothesis 5c. The educational level of the owner/manager is positively related to long-term leverage

Hypothesis 5d. The educational level of the owner/manager is positively related to bank financing

6.2.6 Managerial experience of the owner/manager

As with education the experience of the owner/manager should in theory provide lenders with a signal as to the quality of the enterprises' human capital and improve their ability to access external financing. Despite this, previous empirical work generally reveals no or a negative relationship between the managerial experience of the owner/manager and firm leverage (Scherr et al., 1993; Coleman and Cohn, 2000; Cassar, 2004). Scherr et al. (1993) finds evidence of a negative relationship between the entrepreneur's managerial experience and use of external debt. Coleman and Cohn (2000) find no evidence of a relationship between years of managerial experience and external debt. Cassar (2004) demonstrates a negative although not strongly significant relationship between years of experience and leverage. He suggests these findings might be explained by the fact that owner/managers with greater experience tend to be more risk and control averse than owner/managers with less experience. These results may also be explained by the fact that owner/managers with a strong managerial background may be able to conduct business with less financial capital than their less experienced counterparts, due to their knowledge and expertise (Chandler and Hanks, 1998).

In contrast to the results of empirical work in mature economies recent work on Chinese SMEs by Zhang (2008) finds that SMEs whose owner/managers with prior business experience before establishing their own business are more likely to rely on formal financing mechanisms than those who have not, leading to the following hypotheses:

Hypothesis 6a. The managerial experience of the owner/manager is positively related to leverage

Hypothesis 6b. The managerial experience of the owner/manager is positively related to short-term leverage

Hypothesis 6c. The managerial experience of the owner/manager is positively related to long-term leverage

Hypothesis 6d. The managerial experience of the owner/manager is positively related to bank financing

6.2.7 Age of the owner/manager

Generally, empirical work in developed economies indicates a negative relationship or no relationship between the age of the owner/manager and the SMEs reliance on external sources of finance (Van der Wijst; 1989, Scherr et al., 1994; Romano et al., 2000; Bell and Vos, 2009). Van der Wijst (1989) find that older owner/managers use less external debt finance and are less willing to accept external equity than younger owner/managers. Scherr et al. (1994) hypothesise that lenders may be more willing to lend to older and more experienced owner/managers as they will more confident over their ability to perform. However, their results show the opposite, a negative and statistically significant relationship between the age of the owner/manager and use of external financing. They suggest this may be a result of a number of factors: the reluctance of financiers to lend to older people because of their shorter expected time of ownership, the fact that older owner/managers are more risk averse than younger ones and the fact that older owner/managers are wealthier and use more of their personal wealth to finance their business operations than younger owner/managers. In contrast, Romano et al. (2000) find that the age of the enterprise owner/manager is not a significant predictor of the reliance on an SME on external sources of finance. Bell and Vos (2009) find a negative relationship between the age of the owner/manager and use of debt financing. They argue that this results from the fact that older

owner/managers are less concerned with gaining wealth and more concerned about maintaining control and independence of their business.

It is suspected that in China a negative relationship will be found between the age of the owner/manager and firm leverage. Analysis of interview transcripts in the previous chapter suggests that older owner/managers are more control and risk averse, preferring to rely on their own sources of funds before resorting to external financing. This leads to the following hypotheses:

Hypothesis 7a. The age of the owner/manager is negatively related to firm leverage

Hypothesis 7b. The age of the owner/manager is negatively related to short-term leverage

Hypothesis 7c. The age of the owner/manager is negatively related to long-term leverage

Hypothesis 7d. The age of the owner/manager is negatively related to bank financing

6.2.8 Network ties

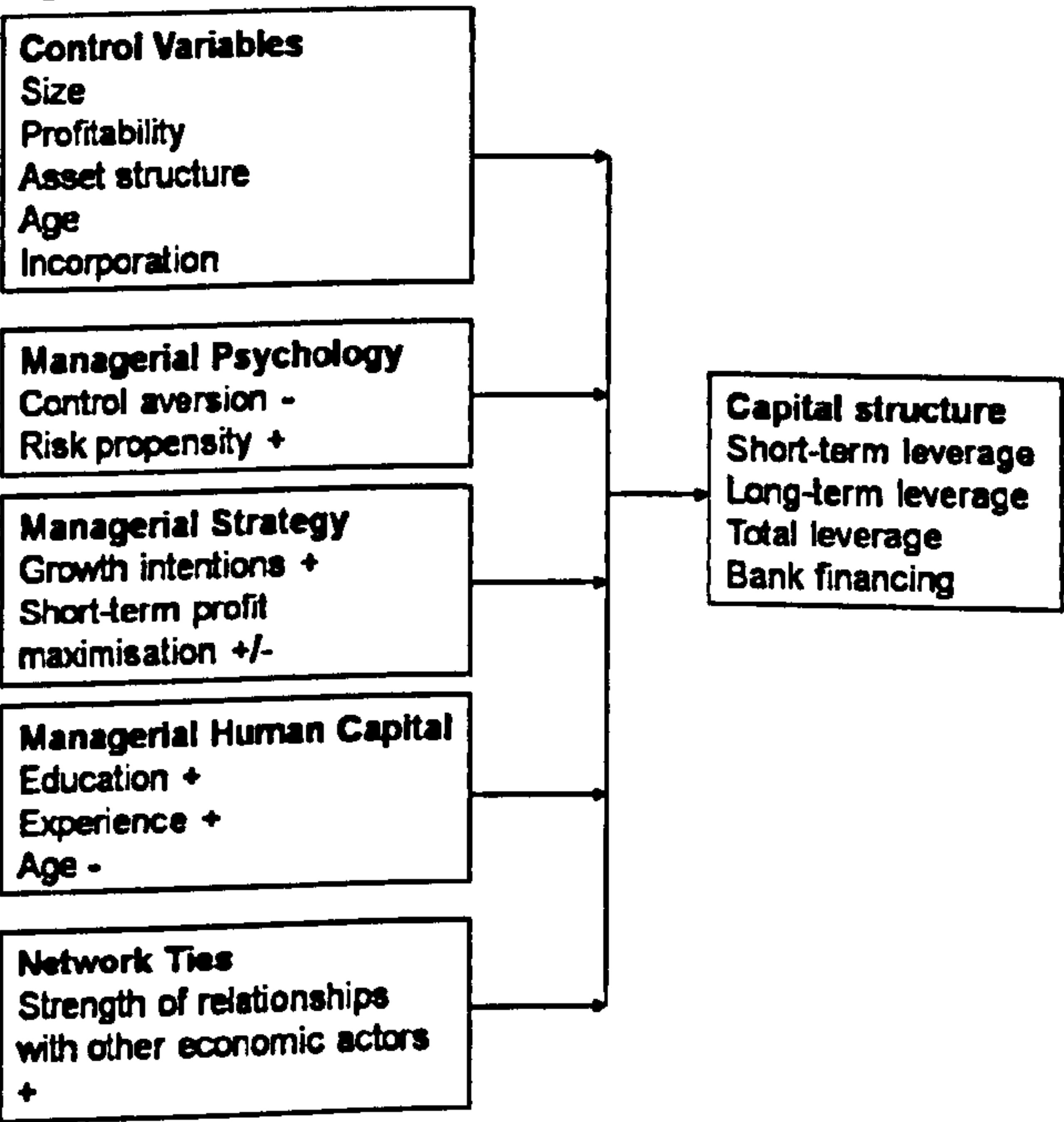
Over the last decade there has been a growing literature on the relationship between network ties and firm performance in the Chinese context (Peng and Luo, 2000; Zhang and Fung, 2006; Fung et al., 2007). However, limited work has been done as to whether the network ties of an SME influence their financing decisions. Research studies in other developing economies suggest that the network ties owner/managers possess with executives at other firms and financiers are an important determinant of capital structure (Nguyen and Ramachandran, 2006; Le and Nguyen, 2009). Nguyen and Ramachandran (2006) find that building close inter-firm and bank/firm relationships enables SMEs to get preferential access to credit over their competitors and employ more debt, especially short term debt, in their capital structure. Le and Nguyen (2009) find that networking with customers and government officials promotes the use of bank financing in their capital structure. Empirical work in the US context also demonstrates that firms are able to gain better access to bank financing at a more competitive price when their transactions with financiers are embedded in social relationships (Uzzi, 1999). These findings along with the findings from the previous chapter indicate that the network ties of the owner/managers, are an important determinant of capital structure for SMEs. In China where the government continues to maintain significant control over the banking sector (Farrell et al., 2006;

Brandt and Zhu, 2007) it might be expected that firms with stronger network ties have better access to external sources of finance leading to the following hypotheses:

- Hypothesis 8a.* The stronger the network ties of the SME the higher the leverage in their capital structure
- Hypothesis 8b.* The stronger the network ties of the SME the higher the short-term leverage in their capital structure
- Hypothesis 8c.* The stronger the network ties of the SME the higher the long-term leverage in their capital structure
- Hypothesis 8c.* The stronger the network ties of the SME the higher the proportion of bank financing in their capital structure

The proposed analytical model incorporating the stated hypotheses can be seen in Figure 6.1. In the following section the methodology adopted to test the theoretical model will be outlined.

Figure 6.1: Capital structure determinants of Chinese SMEs. Proposed analytical framework



6.3 Methodology

6.3.1 Choice of methods

In the present study survey questionnaires were utilised as the firm-level dataset used in Chapter 4 did not provide the relevant information that would be needed to test the proposed model. The survey collected information on managerial strategy, psychology, human capital and network ties for each enterprise in the sample. A major benefit of self-completion questionnaires for this particular research is that respondents feel more comfortable providing sensitive financial information in an anonymous form than would be the case in a face-to-face interview.

The questionnaire was developed with reference to the findings from interviews in the previous chapter and the body of theoretical and empirical literature. The final version of the questionnaire and cover letter in both English and Chinese are in Appendices 2 and 3. The questionnaire contained eight major sections. The first and second sections asked for information on financing sources and the major barriers to financing. In the third section respondents were asked to provide information on their relationship with their bank. The fourth section asked for information on the firm's network ties with other firms, financial institutions and government officials. In the fifth and sixth sections respondents were requested to provide information on their strategic orientation and evaluate their attitudes towards external financing. In the seventh section respondents were asked to provide information about the firm and its finances and the eighth and final section asked for personal information on the CEO of the business.

Care was taken to ensure the questionnaire was perceived by respondents as easy to complete, interesting and professional. The original version of the questionnaire in English was translated into Chinese by a research assistant bilingual in English and Chinese. Care was taken to ensure the lexical, grammatical and experiential meaning of the original questionnaire was fully conveyed in the Chinese translation (Usunier, 1998). The Chinese version was then checked by two other bilingual colleagues in English and Chinese for accuracy. The back-translation procedure recommended by Brislin (1993) was

then followed as previously. When it was discovered that the translated questionnaire was inconsistent with the original version discussions were undertaken between the translators and an agreed translation was arrived upon. The final versions of the original English version and the translated Chinese version were then judged for equivalency by a bilingual colleague independent of the translation process.

Prior to the questionnaire being distributed it was pilot tested to determine its face validity and readability. It was distributed to five owner/managers of SMEs in the area of Zhejiang Province in which the research was to be carried out. Care was taken to ensure that the group were as similar as possible to the final population of the research sample. Each questionnaire was examined to see whether respondents had any trouble answering questions and all were fully answered. Respondents were also interviewed to obtain further information about problems with the questionnaire. The interviews were used to find out whether any questions were unclear or ambiguous, whether the structure of the questionnaire was appropriate, whether there were any questions that the respondents were unable or unwilling to answer and the required time it took to answer the questionnaire.

As a result of the examination of completed questionnaires and interview feedback from pilot testing some slight changes were made to the questionnaire. The order of questions was changed. Difficult and potentially sensitive questionnaires were placed at the end of the questionnaire to ensure a better response rate. If these questions had been put at the front of the questionnaire it may have resulted in the failure of some respondents to complete the questionnaire.

6.3.2 Sample and data collection

Before distributing the survey questionnaires to respondents, approval was gained from the ethics committee of the university to carry out the research. During the period July-August 2009 the questionnaires were distributed to 200 SMEs in Shaoxing city, Zhejiang Province, from the dataset of 1539 firms included in Chapter 4. All firms to which the questionnaires were distributed met the Chinese government definition of SMEs by employee numbers, annual revenue and total assets (see Table 2.1 in Chapter 2). Due to the difficulties in obtaining an adequate sample size in this location, 100 questionnaires were also distributed to SMEs in Taizhou city, the fifth largest city in Zhejiang Province.

The sampling strategy adopted was influenced by the difficulties inherent in conducting research on SMEs in China. Previous research highlights the challenges faced in using representative sampling techniques in China, where a general distrust of outsiders results in low response rates to mail-based surveys (Zheng et al., 2006). In order to overcome these challenges survey questionnaires were distributed with the help of three intermediaries, one of whom was a local government official and the others entrepreneurs.

Before agreeing to participate in the research each respondent was provided with a statement about the research, promised confidentiality and informed the survey was only to be used for academic purposes. Although the use of intermediaries resulted in the use of non-probability sampling, the difficulties associated with using probability sampling when conducting research on Chinese SMEs meant that the chosen sampling method would be more representative of the population than through the use of a probability-based approach (Tabachnick and Fidell, 2000).

Packages containing a covering letter and a questionnaire were distributed to the CEO of each enterprise. The covering letter set out the aims of the research project and stressed that all individual responses would be kept anonymous and confidential. Respondents were requested that they fill in the questionnaire in consultation with their chief financial officer.

The questionnaires were collected at a later date by the research team. Out of 300 questionnaires distributed a total of 214 were returned to the research team, giving a response rate of around 70 per cent. This is high in comparison to other similar studies in the SME context where response rates of less than 10 per cent are common (Curran and Blackburn, 2001). The use of intermediaries to provide an introduction to research participants was one of the major factors behind the high response rate. Out of 214 questionnaires returned 52 were discarded from analysis due to incomplete responses, leaving 162 completed questionnaires.

6.3.3 Operationalisation of variables

The operationalisation of variables used in the survey is described in this section.

Dependent variables

Leverage was measured by three variables: total, short-term and long-term leverage. Total leverage (*TL*) was measured as total debt divided by total assets, short-term leverage (*STL*) as short-term liabilities divided by total assets and long-term leverage (*LTL*) as long-term liabilities divided by total assets. Respondents were asked to provide figures for the last financial year. Bank financing was also included as a dependent variable (*BF*). It was measured as the proportion of total financing accounted for by bank financing.

Independent variables- managerial strategy

Two variables were included to measure the strategic objectives of owner/managers.

Growth intentions (*GI*) were measured using one item 'One of our major objectives is to increase market share as quickly as possible'. CEOs were asked to indicate the extent to which they agreed with each of the items on five-point Likert scales where 1= strongly disagree and 5= strongly agree.

Short-term profit maximisation intentions (*PMI*) were measured using one item 'One of our major objectives is to maximise profits in the short-term'. CEOs were asked to indicate the extent to which they agreed with each of the items on five-point Likert scales where 1= strongly disagree and 5= strongly agree.

Independent variables- managerial psychology

Control aversion (*CA*) was measured using one item 'we intend to retain a majority stake in the business for the founders'. CEOs were asked to indicate the extent to which they agreed with the item on a five-point Likert scale where 1= strongly disagree and 5= strongly agree.

Risk propensity (*RP*) was measured using a one item 'when doing business it is important to take risks'. CEOs were asked to indicate the extent to which they agreed with the item on a five-point Likert scale where 1= strongly disagree and 5= strongly agree.

Independent variables- managerial human capital

The human capital of the owner/manager was measured using several variables, consistent with proxies utilised in previous work (Bates, 1990; Scherr et al., 1994; Coleman and Cohn, 2000; Cassar, 2004).

They were age (*MANAGE*), experience (*EXP*) and educational background (*EDU*). Owner/manager age (*MANAGE*) was measured as age in years. The experience of the owner/manager (*EXP*) was measured as length of experience as senior manager, and educational level of the owner/manager (*EDU*) was measured by a dummy variable, whether or not they had received a university education. University educated CEOs were coded 1, those who had not graduated from university were coded 0.

Independent variables- network ties

Managerial network ties (*NET*) were measured using three items taken from Wu and Leung (2005). These items assess the strength of the CEOs network ties with other firms, government and financial institutions. The items were 'we have many close relationships with other firms', 'we have very good business relationships with local government officers' and 'we have very good business relationships with banks'. CEOs were asked to indicate the extent to which they agreed with each of the items on five-point Likert scales where 1= strongly disagree and 5= strongly agree. This scale was chosen in order to obtain more reliable responses than would have been the case had more sensitive questions been asked such as "how much do you spend on entertaining government/bank officials". The name generator approach which has been used in social network analysis was also inappropriate for measuring network ties, due to the fact that the CEOs spoken to typically considered their contacts with officials as a business secret which they were unwilling to disclose. Exploratory factor analysis was conducted on the three item scale. The scale had a composite reliability estimate (Cronbach's Alpha) of 0.741, which is greater than 0.7, the threshold commonly used for reliability (Fornell and Larcker, 1981). This suggests that the three items loaded clearly onto one factor and demonstrates good discriminant validity of the construct.

Control variables- firm level

The same proxies were used to measure the control variables as in Chapter four. The size of the firm (*SIZE*) was measured as the log of total revenue (Titman and Wessels, 1988) in natural logarithm to control for any possible heteroscedasticity and ensure linearity in the data. The age of the firm (*AGE*) was given as age in years at the end of the last financial year (Michaelas et al., 1999; Abor and Biekpe, 2007). Profitability (*PROF*) was taken as return on assets before interest (Michaelas et al., 1999; Cassar and Holmes, 2003; Johnsen and McMahon, 2005). Asset structure (*AS*) was measured as the

ratio of fixed assets to total assets (Hall et al., 2000; Johnsen and McMahon, 2005; Nguyen and Ramachandran, 2006). A dummy variable (*INC*) was utilised to measure incorporation of the firm. It took a value of 0 for a sole trading enterprise and value of 1 for a private limited enterprise.

The cross-sectional OLS regression estimated, based on the above variables, is presented in Formula 6.1.

Formula 6.1

$$Y = X\beta + \varepsilon$$

Y denotes the dependent variable which in this case is measured by four separate variables to capture total leverage, short-term leverage, long-term leverage and proportion of bank financing. *X* represents the vector of explanatory variables of capital structure, described above, and ε stands for the error term. To account for any potential heteroscedasticity and obtain robust regression results, the estimation is conducted using White's heteroscedasticity-consistent standard errors estimation technique.

6.3.5 Descriptive statistics

In Section A of the questionnaire respondents were asked to rank the importance of each financing source to their businesses on a Likert scale of 1 to 5, where 5= very important and 1= not important, and indicate the approximate percentage of total financing provided by each source of finance. The findings are presented in Table 6.1. Retained profits and bank loans were the most important sources of finance. This was followed by new equity and loans from the owner/directors and their family members. Trade credit, government loans and equity investment from outside investors were then the next most important sources of finance. The least important sources of finance were loans from credit networks, leasing and other informal sources of financing respectively. As for the reported percentage of financing obtained from each source retained profits ranked first, accounting for over 33.1 per cent of all enterprises financing. This was closely followed by bank loans at 26.5 per cent, and new equity and loans from the owner/directors and their family members at 12.6 per cent and 8.1 per cent respectively. Other significant sources of finance came from loans from friends (4 per cent), government loans (4 per cent) and trade credit (3.5 per cent). Informal financing such as loans from

credit networks/money lenders (0.8 per cent) and other informal sources (2.2 per cent), were not widely use by the enterprises in the sample. These findings are in line with the findings from semi-structured interviews in the previous chapter which indicate a growing reliance on formal financing mechanism by SMEs in China. The least popular sources of financing were venture capital funds and leasing, which accounted for 1.4 per cent and 1 per cent respectively.

Table 6.1: Financing sources

Financing Source	Importance	Percentage of total
Retained profits	3.98	33.1%
New equity from the owners/directors and their family members	3.08	12.6%
Loans from the owners/directors and their family members	2.86	8.1%
Bank loans	3.98	26.5%
Loans from friends	2.57	4.0%
Loans from credit networks/money lenders	1.76	0.8%
Loans from other informal sources	1.98	2.2%
Government loans	2.60	4.0%
Trade credit	2.65	3.5%
Venture capital funds	2.05	1.4%
Equity from outside investors	2.49	2.9%
Leasing	1.97	1.0%

In Section B of the questionnaire respondents were asked to indicate the extent to which they considered several factors to be barriers to accessing adequate sources of external on a likert scale of 1 to 5, where 5=significant constraint and 1= no constraint. The results can be seen in Table 6.2. The collateral requirements of banks were seen as the most significant barrier, followed by high interest rates and loan application time. Poor accounting records were considered less of a barrier to accessing finance compared to the other factors.

Table 6.2: Financing barriers

Barriers to Accessing Finance	Importance
High interest rates charged by banks	3.36
Collateral requirements of banks	3.48
Length of time required to get a loan	3.35
Poor accounting records	3.19

In Table 6.3 the correlations between study variables, and descriptive statistics are presented. The correlation coefficients between regressors are less than 0.6, and therefore are not large enough to suggest any problem with collinearity.

With regard to the independent variables, the SMEs in the sample averaged around 29 million RMB in turnover and had been in business for an average of 8.69 years. The figures for average turnover and age were higher than that of the firms in the 2004-2005 dataset utilised in chapter 4. 24.2 per cent of the enterprises in the survey were sole trading enterprises and 75.8 per cent private limited enterprises. The SMEs in the sample had an average total debt to assets ratio of around 49 per cent. This is significantly lower than for the enterprises in the dataset used in Chapter 4 which contained data for the period 2004 to 2005. The average short-term debt to assets ratio for enterprises in the sample was around 29 per cent and the long-term debt to assets ratio was around 20 per cent. The amount of long-term debt in proportion to total debt was much higher than that in the 2004-2005 dataset utilised in Chapter 4, and that of listed firms sampled in previous empirical studies (Chen, 2004; Huang and Song, 2005). This suggests that access to long-term financing may have significantly improved for SMEs in the areas of Zhejiang Province in which the survey was distributed over the four years to 2009. The results from the survey also seem to contradict the findings from the semi-structured interviews, which suggested that little use is made by SMEs of long-term debt in their capital structure.

One reason for these apparent contradictions may be the fact that high-performing, more profitable enterprises might have been over represented in the sample compared to firms in the original 2004-2005 dataset. Although difficult to confirm, it is possible that poor performing enterprises would have been less likely to respond to the survey questionnaire. Indeed the average profitability (return on

assets) for sampled firms was much higher in the present survey at 14 per cent compared to minus 0.1 per cent for firms in the 2004-2005 dataset. The proportion of fixed assets to total assets was also much higher than for firms in the 2004-2005 dataset at 46 per cent compared to 24 per cent. The higher levels of profitability and proportion of fixed to total assets might have also arisen as the enterprises in the present sample were larger in size and older than the enterprises in the 2004-2005 dataset. The fact that only firms in the original 2004-2005 dataset were sampled, to the exclusion of firms who had been established over the last 3 years may have resulted in survivorship bias as only successful firms who had survived the early years of business development were included in the sample. This may have been another reason for the higher reported levels of long-term debt, profitability and fixed assets to total assets ratios for sampled enterprises. Another possible reason for the higher levels of profitability of SMEs sampled in this chapter, is that while they may tend to under-report their profits to the government authorities in order to reduce tax liabilities, they may be more likely to provide accurate figures in anonymized surveys to outside researchers.

In Section D of the questionnaire respondents were asked to indicate how strong they believed their relationships were with other firms, government officials and their banks. Analysis of the data revealed that their working relationships with other firms and their banks tended to be significantly stronger than their working relationships with government officials. In Section E respondents were asked to indicate the extent to which they viewed growth and profit maximisation as important business objectives of their firm. As can be seen in Table 6.3 both growth and short-term profit maximisation were both considered important objectives by the sampled respondents, with growth receiving a marginally higher rating. In section F of the questionnaire respondents were asked to indicate the extent to which they agreed with certain statements designed to elicit their levels of control aversion and risk propensity. Their answers indicated general aversion to dilution of ownership which would lead to a loss of majority control of the firm by its original owners. This finding confirms the results of previous work which indicates high level of control aversion amongst the owner/managers of SMEs (Harvey and Evans, 1995; Hutchinson, 1995; Berger and Udell, 1998). The respondents also revealed generally high levels of risk propensity, with the majority of respondents indicating their willingness to take risks when doing business.

As for the demographic profile of the respondents to the survey, on average they were 43.56 years of age and had 11.34 years of managerial experience as CEO of their existing firm or in the same industry. 42.1 per cent of them were university educated.

Table 6.3: Correlations between variables

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. TL	0.49	0.36	1.000															
2. STL	0.29	0.24	.667**	1.000														
3. LTL	0.20	0.29	.702**	.039	1.000													
4.SIZE	29m	94.5m	.060	.234**	-.122	1.000												
5. AGE	8.69	6.2	.330**	.151*	.395**	.204**	1.000											
6. INC	0.76	0.43	.420**	.167*	.424**	.141	.484**	1.000										
7. PROF	0.14	0.23	-.367**	-.107	-.391**	.152	-.264**	-.486**	1.000									
8. AS	0.46	0.51	-.007	.044	-.049	.075	.269**	-.055	.199*	1.000								
9. GI	4.15	0.82	-.349**	-.077	-.442**	.034	-.452**	-.400**	.322**	-.080	1.000							
10. PMI	3.78	0.99	-.282**	.006	-.452**	.030	-.272**	-.401**	.347**	.250**	.444**	1.000						
11. CA	3.73	0.92	-.306**	-.143	-.314**	-.070	-.332**	-.257**	.207**	.015	.352**	.282**	1.000					
12. RP	3.79	0.79	.104	-.060	.192*	-.093	.027	.133	-.065	-.012	.061	.190*	.197**	1.000				
13. MANAGE	43.56	6.8	.139	-.006	.176*	.251**	.380**	.242**	.000	.214*	-.115	-.022	-.153	.191*	1.000			
14. EXP	11.34	7.6	.315**	.081	.364**	.216**	.570**	.401**	-.185*	.062	-.214**	-.316**	-.198*	.194*	.430**	1.000		
15. EDU	0.42	0.50	-.075	.039	-.119	.193*	-.081	.087	.076	.040	.066	.153	-.060	-.004	-.081	.039	1.000	
16. NET	3.68	0.86	-.466**	-.140	-.564**	.236**	-.373**	-.359**	.467**	.189*	.574**	.525**	.246**	.050	-.018	-.178*	.187*	1.000

*, **, indicate significance at the 5% and 1% levels respectively. TL= Total leverage; STL= Short-term leverage; LTL= Long-term leverage; SIZE= Size; Age= Age in years; INC= whether incorporated or not; Prof= Profitability; AS= Asset structure; GI= Growth Intentions; PMI= Profit maximisation intentions; CA= Control aversion; RP= Risk propensity; MANAGE= Owner/manager age; EXP= Owner/manager experience; EDU= Owner/manager education; NET= Network ties. For an explanation as to how each variable was constructed please see section 6.3.3

6.4 Results

A total of eight regressions were undertaken on the data with results presented in Table 6.4. A summary of the results are provided in Table 6.5. In regressions one and two the relationships between the explanatory variables and total leverage were investigated. In the first regression two control variables, profitability and asset structure were excluded from the analysis due to the lack of observations for a significant number of firms. In regression two these variables were included, resulting in a smaller sample size. The data analysis provided no support for hypotheses 1a and 2a. Both growth and profit maximisation intentions were not found to be significantly related to total leverage. In both regressions control aversion and risk propensity were found to influence the total leverage of sampled firms, in line with hypotheses 3a and 4a. A negative relationship was found between control aversion and total leverage. This indicates that the more control averse the owner/manager of the SME the more likely they were to limit the amount of debt in their capital structure. The opposite was true of risk propensity. Owner/managers who were more willing to take risks were more likely to have larger amounts of debt in their capital structure. Out of the three variables included to represent human capital, only managerial experience was found to be positively related to total leverage, in line with hypothesis 6a. No support was found for hypotheses 5a and 7a, indicating that both the age and education levels of owner/managers did not significantly impact on the amount of debt used in their capital structure. Surprisingly, a negative association was found between the firm's network ties and their total leverage, contrary to hypothesis 8a. This suggests that firms with stronger relationships with other economic actors were more likely to have lower amounts of debt in their capital structure. As for the control variables incorporated firms were found to have significantly higher levels of debt than non-incorporated firms when data analysis was conducted on the full sample of firms (regression one). When asset structure and profitability measures were added to the regression (regression two) size and asset structure were found to be positively related to leverage, and the relationship between incorporation and leverage became insignificant. In contrast to the findings from Chapter 4, no evidence was found of a significant relationship between firm age and profitability, and total leverage.

In regressions three and four the relationships between the explanatory variables and short-term leverage were investigated. Profitability and asset structure were excluded from analysis in regression

three whereas in regression four these variables were included resulting in a smaller sample size. Data analysis revealed some influence of the strategic objectives of owner/managers on the short-term leverage of firms in the sample. Although growth intentions was not found to significantly influence the short-term leverage of sampled firms a positive relationship was found between profit maximisation intentions and short-term leverage confirming hypothesis 2b. Contrary to the findings of regressions on total leverage, no significant influence of control aversion and risk propensity was found on the short-term leverage of sampled firms in both regressions, providing no support for hypotheses 3b and 4b. None of the variables included to measure managerial human capital significantly influenced the amount of short-term leverage of sampled firms, contrary to hypotheses 5b, 6b and 7b. CEO age, education level and experience were not found to influence the short-term financing decisions of SMEs. In line with findings for total leverage, network ties were found to be negatively related to short-term leverage in regression three, the opposite of what was hypothesized in hypothesis 8b. However, when profitability and asset structure were controlled for, the relationship between network ties and short-term leverage became insignificant. As for the control variables, size was positively related to short-term leverage in both regressions three and four. This suggests that as companies grow in size they have more access to short-term financing as a proportion of total financing. Incorporation was found to be significantly related to short-term leverage in regression three. However, when profitability and asset structure were adopted as control variables in regression four, the impact of size on short-term leverage became insignificant. None of the other control variables were significant determinants of short-term leverage.

In regressions five and six the relationships between the explanatory variables and long-term leverage were investigated. As is the previous sets of equations, profitability and asset structure were excluded from analysis in regression five whereas in regression six these variables were included. Analysis of the data provided no support for hypotheses 1c and 2c, revealing limited influence of the strategic objectives of owner/managers on the use of long-term financing by sampled firms. No significant relationship was found between growth and profit maximisation intentions, and total leverage. As for total leverage, control aversion and risk propensity were found to significantly influence the amount of long-term leverage in the capital structure of firms in both regressions, in line with hypotheses 3c and 4c. Control aversion was negatively related to long-term leverage, indicating that control averse owners

were likely to limit the amount of long-term debt in their capital structure. Risk propensity was positively related to long-term leverage indicating that owner/managers with high levels of risk propensity were more likely to use larger amounts of long-term debt in their capital structure. Limited support was found between the three variables included to represent the human capital of the owner/manager and long-term leverage. Only one variable, CEO experience, was significantly related to long-term leverage in regression six. However, when asset structure and profitability were not controlled for on the full sample of firms in regression five, this variable became insignificant. Data analysis provided no support for hypotheses 5c and 7c. A negative relationship was found between network ties and long-term leverage in both regressions, as for total leverage, the opposite of what was hypothesised in hypothesis 8c. This suggests that firms with stronger relationships with other economic actors were more likely to have lower amounts of long-term debt in their capital structure. As for the control variables a positive relationship was only found between asset structure and long-term leverage. None of the other control variables were significant determinants of long-term leverage in the capital structures of sampled firms.

In regressions seven and eight the relationships between the explanatory variables and bank financing were examined. In contrast to the other dependent variables, bank financing did not measure the total amount of bank financing as a proportion of total assets, but the proportion of bank financing as a percentage of total financing. As for the other dependent variables, profitability and asset structure were excluded from analysis in the first regression (regression seven). Analysis of the data provided some support for the influence of the strategic objectives of owner/managers on the proportion of bank financing in the capital structure of sampled firms. In line with hypothesis 1d a positive relationship was found between growth intentions and proportion of bank financing in both regressions. However, no support was provided for hypothesis 2d. This suggests that profit maximisation objectives did not influence the use of bank financing by sampled firms. No evidence was found in support of hypothesis 3d in both regressions, indicating that the control aversion of owner/managers did not influence the use of bank financing by the sampled SMEs. In regression seven a positive relationship was found between risk propensity and use of bank financing in line with hypothesis 4d. However, when asset structure and profitability were controlled for in regression eight, this variable became insignificant. The three variables included to represent human capital did not impact on the use of bank financing by sampled

firms. Neither CEO age, experience or education level impacted on their propensity to use bank financing, contradicting hypotheses 5d, 6d and 7d.

Contrary to hypothesis 8d network ties did not significantly impact on the proportion of debt in the capital structure of sampled firms in both regressions. This indicates that firms with stronger relationships with other economic actors do not necessarily have better access to bank financing as was hypothesised. As for the control variables, both size and profitability were significantly related to the use of bank financing as a proportion of total financing. Size was found to be positively related to bank financing in both regressions and profitability was found to be negatively related to bank financing in regression eight. All other control variables were not significantly related to the use of bank financing.

Table 6.4: Regression results

	Full Sample TL (1)	Partial Sample TL (2)	Full Sample STL (3)	Partial Sample STL (4)	Full Sample LTL (5)	Partial Sample LTL (6)	Full Sample BF (7)	Partial Sample BF (8)
Control Variables								
SIZE	.072	.170*	.227**	.239**	-.100	-.024	.197**	.275**
AGE	-.078	-.129	-.018	-.053	-.081	-.100	.074	.084
INC	.256***	.133	.214**	.104	.135	.057	.164*	-.083
PROF		-.163		-.056		-.136		-.318***
AS		.184*		-.074		.280***		.076
Independent Variables								
GI	.054	.115	.064	.086	.012	.054	.179*	.222**
PM	.053	.079	.216**	.261**	-.115	-.148	-.123	-.006
CA	-.237***	-.293***	-.061	-.066	-.239***	-.277***	-.116	-.080
RP	.203***	.348***	-.025	-.052	.269***	.449***	.204**	.142
MANAGE	-.089	-.168	-.111	-.130	-.017	-.074	.133	.180
EXP	.148*	.187*	.084	-.012	.111	.227**	-.097	-.136
EDU	-.031	.010	-.036	.037	-.008	-.023	.066	.015
NET	-.355***	-.320***	-.208**	-.066	-.261***	-.308***	-.124	-.040
Sample size	162	101	162	101	162	101	153	94
R ²	0.346	0.293	0.113	0.150	0.347	0.326	0.226	0.268

*, **, *** indicate significance at the 10%, 5% and 1% levels respectively. TL= Total leverage; STL= Short-term leverage; LTL= Long-term leverage; BF= bank financing; SIZE= Size; Age= Age in years; INC= whether incorporated or not; Prof= Profitability; AS= Asset structure; GI= Growth Intentions; PMI= Profit maximisation intentions; CA= Control aversion; RP= Risk propensity; MANAGE= Owner/manager age; EXP= Owner/manager experience; EDU= Owner/manager education; NET= Network ties. For an explanation as to how each variable was constructed please see section 6.3.3

Table 6.5: Summary of the results

H1a: The growth intentions of the owner/manager are positively related to leverage	Not Supported
H1b: The growth intentions of the owner/manager are positively related to short-term leverage	Not Supported
H1c: The growth intentions of the owner/manager are positively related to long-term leverage	Not Supported
H1d: The growth intentions of the owner/manager are positively related to bank financing	Supported
H2a: The intention to maximise profits on the part of the owner/manager is positively related to leverage	Not Supported
H2b: The intention to maximise profits on the part of the owner/manager is positively related to short-term leverage	Supported
H2c: The intention to maximise profits on the part of the owner/manager is negatively related to long-term leverage	Not Supported
H2d: The intention to maximise profits on the part of the owner/manager is positively related to bank financing	Not Supported
H3a: The control aversion of the owner/manager is negatively related to leverage	Supported
H3b: The control aversion of the owner/manager is negatively related to short-term leverage	Not Supported
H3c: The control aversion of the owner/manager is negatively related to long-term leverage	Supported
H3d: The control aversion of the owner/manager is negatively related to bank financing	Not Supported
H4a: The risk propensity of the owner/manager is positively related to leverage	Supported
H4b: The risk propensity of the owner/manager is positively related to short-term leverage	Not Supported
H4c: The risk propensity of the owner/manager is positively related to long-term leverage	Supported
H4d: The risk propensity of the owner/manager is positively related to bank financing	Partially supported
H5a: The educational level of the owner/manager is positively related to leverage	Not Supported
H5b: The educational level of the owner/manager is positively related to short-term leverage	Not Supported
H5c: The educational level of the owner/manager is positively related to long-term leverage	Not Supported
H5d: The educational level of the owner/manager is positively related to bank financing	Not Supported
H6a: The managerial experience of the owner/manager is positively related to leverage	Supported
H6b: The managerial experience of the owner/manager is positively related to short-term leverage	Not Supported
H6c: The managerial experience of the owner/manager is positively related to long-term leverage	Partially supported
H6d: The managerial experience of the owner/manager is positively related to bank financing	Not Supported
H7a: The age of the owner/manager is negatively related to firm leverage	Not Supported
H7b: The age of the owner/manager is negatively related to short-term leverage	Not Supported
H7c: The age of the owner/manager is negatively related to long-term leverage	Not Supported

H7d: The age of the owner/manager is negatively related to bank financing	Not Supported
H8a: The stronger the network ties of the SME the higher the leverage in their capital structure	Not Supported
H8b: The stronger the network ties of the SME the higher the short-term leverage in their capital structure	Not Supported
H8c: The stronger the network ties of the SME the higher the long-term leverage in their capital structure	Not Supported
H8d: The stronger the network ties of the SME the higher the proportion of bank financing in their capital structure	Not Supported

6.5 Discussion

The analysis of survey data in this chapter revealed that long-term financing, is becoming increasingly important to SMEs. The enterprises sampled in this chapter had much higher proportion of long-term financing in their capital structure than those sampled in Chapter 4 and in previous empirical studies in China (Chen, 2004; Chen and Strange, 2005). These findings can be reconciled in several ways. The present survey was conducted at least four years after previous data had been collected suggesting that recent reforms such as the introduction of the SME Promotion Law in 2003 and the Law on Property Rights in 2007 may have led to improvements in the ability of SMEs to borrow formally from financial institutions. As a result of the promulgation of the SME Promotion Law local governments were required to develop local support systems that provide finance and business support services to local enterprises (Atherton, 2008). The recognition of private property under the Law on Property Rights should have also improved the ability of private SMEs to use property as collateral for bank loans (Atherton, 2008). In addition, the findings might also be explained by the fact that the Chinese government authorities have encouraged banks to provide more long-term credit to SMEs in the 2008-2009 economic downturn which seriously affected the global economy (Interview respondent Z, Chapter 5). A third explanation for the findings is the fact that firms who responded to this survey had been in business for over 8.5 years on average. This is in comparison to around 4.5 years for firms in the dataset used in Chapter 4. Previous research indicates that as firms get older they become more information transparent which results in greater willingness on the part of lenders to provide them with long-term financing (Li et al., 2009).

The beliefs and attitudes of SME owner/managers towards debt financing, in particular their desire for control and risk aversion, were found to be a major influence on their financing decisions, especially in

the long-term. Such findings are supportive of the theoretical propositions developed by Barton and Matthews (1989) and Matthews et al. (1994) which highlight the influence of managerial attitudes on financing decisions in SMEs. As regards the influence of control aversion of SME decision makers on financing choices, data analysis revealed that the use of debt is strongly related to the perceived risk of losing control over their business. This is in line with the findings from previous empirical work which reveal a negative relationship between control aversion and use of debt in the capital structure of SMEs (Harvey and Evans, 1995; Hutchinson, 1995; Berger and Udell, 1998). Owner/managers who fear that use of external financing might lead to a loss of flexibility and control over decision making to financiers are more likely to limit the amount of debt in their firm's capital structure. As regards the impact of the attitude of management towards risk on the financing of SMEs strong evidence is found of a positive relationship between the risk propensity of the owner/manager and the use of debt in the capital structure of SME. This is in line with Barton and Matthews (1989) and Matthews et al. (1994) who argue that the risk propensity of decision makers will have a significant influence on the debt position of the firm, especially when they provide security for the money that is being lent, in the form of personal assets (Barton and Matthews, 1989; Matthews et al., 1994).

Contrary to Barton and Gordon's (1987) and Barton and Matthew's (1989) theoretical assertions and what was hypothesized, the strategic objectives of owner/managers were only found to influence capital structure decision-making in the SME sector to a limited degree. Although no relationship was found between the growth and profit maximisation intentions of owner/managers, and the total and long-term leverage in the capital structure of surveyed firms, significant relationships were found between growth intentions and the use of bank financing, and short-term profit maximisation intentions and short-term leverage. The positive relationship between growth intentions and the use of bank financing is in line with Cassar (2004) who found a significant relationship between growth intentions and access to bank financing but no relationship between growth intentions and both total and long-term leverage. This suggests that growing SMEs who perceive a need for capital to fund their future development will emphasise building strong relationships with their banks, leading to greater amounts of bank financing in their capital structure than firms with limited growth intentions.

In contrast to the findings of previous work on SMEs in developing countries (Nguyen and Ramachandran, 2006) a negative relationship was found between network ties and all types of financing in the sample. Given the significant constraints faced by Chinese SMEs in seeking external sources of financing as highlighted in the previous literature (Gregory et al., 2000; Batra et al., 2003; Bai et al., 2006), these findings were highly surprising. A number of factors might explain these findings. SMEs with stronger network ties might have lower leverage than those with weaker ties for several reasons. One explanation might be the fact that Chinese firms with stronger network ties are typically more profitable than firms with weaker ties (Peng and Luo, 2000), and as a result are not under the same pressure to seek external sources of debt financing. Indeed, the descriptive statistics for sampled firms revealed a positive relationship between the strength of network ties and the profitability of the firm. When firm profitability was controlled for the strength of the relationship between network ties and total leverage became weaker and the relationship between network ties and short-term leverage became insignificant. Good relationships with government officials and executives at other firms also provide SMEs with greater access to a whole host of resources, other than access to external financing. These resources might include preferential information as regards government policies and business opportunities, business licenses, land, access to market and distribution channels, and favourable policies regarding taxation (Tsang, 1999; Fan, 2002; Tan et al., 2009). Such factors may enhance their performance and reduce their need to seek external financing to support business growth. Additionally, the negative relationship between network ties and leverage might be partly explained by the positive correlation between control aversion and network ties which can be seen from the descriptive statistics. Although firms with strong network ties have the ability to access large amounts of external financing they tend not to do so due to the perceived risk of losing control over their business that this may entail.

The human capital of the owner/manager, as measured by their age and educational achievements was not found to significantly influence the capital structure decision-making of sampled SMEs. This is supportive of the findings from recent work on Australian SMEs (Romano et al., 2000; Cassar, 2004), but conflicts with findings from previous work in the US (Bates, 1990; Coleman and Cohn, 2000). It also goes against the findings of recent work by Zhang (2008) on Chinese SMEs in Sichuan Province which revealed that firms whose owner/managers have a higher education are more likely to rely on

bank financing than those who do not. Data analysis also revealed that firms run by owner/managers with longer experience tended to have higher total leverage than those with less experienced owner/managers. This seems to contradict the findings from previous studies which find no significant or a negative influence of managerial experience on the leverage of SMEs (Scherr et al., 1993; Coleman and Cohn, 2000; Cassar, 2004). These findings suggest that financiers place greater emphasis on the experience of owner/managers when making lending decisions than on their educational background. They might also be partly explained by the fact that more experienced owner/managers tend to be less control averse and more willing to take risks than those with less experience, as can be seen from the descriptive statistics. This is consistent with Zhang's (2008) findings that SMEs owner/managers with prior business experience before establishing their own business are more likely to have greater access to external financing than those with no business experience.

With regards to the firm-level variables a strong relationship was found between the asset structure and capital structure of sampled firms, especially in the long-term. This indicates that SMEs are getting better access to long-term financing from the banking sector than in the past. In line with the results of Chapter 4 and previous studies a negative relationship was found between profitability and all forms of leverage, although only the relationship between profitability and bank financing was statistically significant. A positive relationship was also found between size and all forms of leverage, apart from long-term leverage, where the relationship displayed a negative coefficient. Size was found to be significantly related to both the use of short-term and bank financing. As for age no evidence was found for a significant relationship with all forms of leverage, contrary to the findings of Chapter 4. Additionally, in contrast to the findings of Chapter 4, incorporation was positively related to leverage, suggesting that limited liability firms had higher debt to asset ratios. However, when profitability and asset structure were controlled for the relationship the influence of incorporation on capital structure became insignificant.

6.6 Policy and Managerial Implications

The findings of this chapter have important implications for policy makers, managers and financiers. Policy makers must seek to understand what drives the financing decisions of SMEs in order for them to better target their resources and support to stimulate the economy in the most effective way possible.

Data analysis in this chapter indicated that Chinese SMEs are, to a large extent, control averse, and that control aversion was negatively related to leverage in the capital structures of sampled firms. This has important implications given the contributions made by SMEs to job creation, productivity improvements and innovative activity. When developing effective support mechanisms Chinese policy makers should be aware of how the control aversion of owner/managers impacts on the development of the SME sector. Scepticism towards external control firms may prevent SMEs from seeking and obtaining adequate financing for their business operations (Berggren et al., 2000). This in turn may impact on their ability to grow in size, and ultimately affect their chances of survival.

Instead of simply providing general measures to support the whole population of SMEs it might be more effective for policy makers to concentrate resources on those SMEs who need finance to grow but face difficulties in accessing it due to significant asymmetric information between them and their potential lenders. Support need not be provided for those enterprises whose owner/managers exhibit high levels of control aversion, and are not actively seeking external sources of finance.

Policy makers should also take into account the dynamic nature of the particular industry when developing mechanisms to support SME development (Berggren et al., 2000). SMEs engaged in innovative, new industries marked by rapid technological development will need greater support than SMEs involved in traditional industries, with little potential for growth. Support should be channelled towards enterprises that are most likely to need it rather than to all enterprises irrespective of their individual situation. Policy makers must be also aware of the mismatch of supply and demand for financing in the SME sector when designing policies to support SME development. Profitable firms, with strong networks are less motivated to seek external sources of financing that may subject them to greater scrutiny. They tend to reinvest their profits, before seeking external financing. In contrast firms with fewer network ties have the greatest need for external financing but face greater difficulties borrowing formally due to the existence of high levels of asymmetric information between them and potential financiers. As a result they tend to rely to a greater extent on informal financing mechanisms which result in higher financing costs.

Policy makers must find ways of redirecting support away from successful firms towards firms to those who are in greater need of formal financing but are less able to access it. This may be done by developing effective mechanisms for guaranteeing the debts of firms in innovative new industries that have great potential for growth in the long-term and new firms without the requisite network ties. The government might also help entrepreneurs improve their network ties by holding forums in which they might develop their network ties with business owners and bank officials.

As for the managerial implications of this research owner/managers of SMEs need to assess the consequences that their control aversion and risk aversion might have on their ability to grow and prosper. In doing this they need to conduct an assessment of the industry in which they operate in order to decide whether it is feasible for them to remain control or risk averse or whether these factors might affect their survival in the long-term, especially if their competitors are more willing to take risks and/or let in new investors in order to achieve rapid growth. They also need to recognise the importance that developing strong network ties may bring, in improving profitability and limiting the need to seek external sources of financing. To improve their network ties owner/managers might consider seeking membership of the Communist party and that of local business associations as this has been shown to improve access to external financing (Bai et al., 2006).

Financiers need to recognise the effect their lending policies might have on SMEs. Strict lending requirements and high levels of scrutiny from financial institutions tend to intimidate SMEs, especially those that are control averse. This puts many firms off seeking external financing, and may affect the growth of the SME sector, especially in technology intensive industries where firms require significant amounts of capital to grow rapidly in their initial stages of development. Financiers should consider changing their lending policies according to the characteristics of the market in which the firm operates and the firm's growth potential, and not simply make their lending decisions on the basis of past performance.

6.7 Limitations and Suggestions for Future Research

As with the previous chapters more work needs to be done to determine whether the findings of this chapter are generalisable outside of Zhejiang Province, as previous studies indicate that the financing

conditions of enterprises differ quite considerably from province to province (Gregory et al., 2000). Future research might also be conducted in other developing economies to determine whether the findings of this research are unique to the Chinese cultural setting.

Secondly, due to the use of a non-random sampling strategy the sample in this research might have suffered from self-selection bias. Although measures were taken to ensure the sample was representative of SMEs in Zhejiang Province, the sensitive nature of the questionnaire might have resulted in a higher response rate among more successful firms. In the future researchers should consider using more representative sampling techniques, although this has been shown to result in lower response rates in the Chinese context (Zheng et al., 2006).

Thirdly, the study was not able to fully account for the changing nature of a firm's financing decisions over time. It may be worthwhile to undertake longitudinal research which would enable a more in-depth explanation of how financing decisions change through different stages of firm development. This would enable researchers to examine whether the ability of Chinese SMEs to access adequate sources of external financing is improving or getting worse and whether their financing follows a hierarchical pecking order.

Fourthly, future research might consider using more sophisticated measures for some of the independent variables used in the study. Social network analysis could be undertaken to assess more deeply the extent of the network ties possessed by the individual enterprises. Objective measures such as the amount of money spent on entertainment might also be used as a proxy for building and maintaining network ties. Future research might also consider the use of multiple-item scales to measure some of the constructs in the study such as control aversion and risk propensity. Such scales should result in stronger psychometric properties than single-item scales.

6.8 Conclusion

Some researchers have argued that financial theories of capital structure do not fully explain the capital structures adopted by SMEs (Barton and Matthews, 1989; Matthews et al., 1994). They argue that a complex array of factors, not taken into account by financial theories of capital structure, influence the

financing decisions of firms in the SME sector. These factors include the strategic objectives, psychology, human capital and network ties of owner/managers. In order to examine the influence of these factors on the capital structure adopted by Chinese SMEs a theoretical model was developed taking into consideration both the previous literature in the field and the opinions of key respondents from SMEs. The theoretical model was tested empirically on a sample of 162 firms from Zhejiang Province through the use of a detailed firm-level survey questionnaire.

Data analysis indicated that a combination of factors, other than those posited by financial theories of capital structure influenced the capital structure of sampled firms. In particular the control aversion and risk propensity of owner/managers strongly influenced the capital structure adopted by SMEs. Contrary to what was hypothesised the business objectives of owner/managers had only a limited influence of the financing decisions of SMEs. Firms whose owner/managers had greater growth intentions were more likely to make use of bank financing and firms whose owner/managers had greater profit maximisation intentions in the short-term were more likely to higher amounts of short term debt in their capital structure. The human capital of owner/managers also seemed to have little impact on the financing decisions of SMEs. Only managerial experience was found to be positively related to the amount of debt in the capital structure of sampled firms. Surprisingly, network ties were found to have a negative relationship with leverage in sampled firms. This can be explained by the fact that firms with stronger network ties have less of a need for external financing to higher levels of profitability and greater access to valuable information and business opportunities. They also showed greater control aversion than firms with weaker ties suggesting that although they have the ability to access greater amounts of external financing they do not necessarily do so due to the perception that it might result in loss of control over their business.

The key findings, theoretical and methodological contributions, and policy and managerial implications of this study are discussed in the final chapter.

CHAPTER 7: CONCLUSION

7.1 Introduction

In this chapter the findings from this dissertation are presented in light of the proposed research objectives. In respect of this the theoretical and methodological contributions made to the existing body of literature are examined in detail. Following this the managerial and policy implications of the study are highlighted. The chapter then concludes by presenting the limitations of the present research and providing suggestions for future research.

7.2 Discussion of Research Findings

The main goal of this study was to establish what factors determine the capital structure of private SMEs in the Chinese context and assess the applicability of financial theories of capital structure to SME in the Chinese context. The study also set out to examine whether other theoretical perspectives could be utilised to explain the capital structure decisions of Chinese SMEs.

In Chapter 2 the literature on SME development and SME financing was reviewed with a particular focus on the Chinese institutional context. Firstly, the contribution of the dynamic SME sector to the economic growth experienced in China over the last three decades was highlighted. Following this the constraints faced by Chinese SMEs were outlined, in particular their inability to access adequate financing. A review was then made of previous empirical work on SME financing in the Chinese context, highlighted how the SME sector has seemingly prospered with limited access to formal sources of financing. Following this, the role played by informal financing in the success of Chinese SMEs was discussed and a review was made of how banking sector and capital market reform has impacted on the financing of SMEs. Finally, the constraints faced by SMEs in accessing adequate sources of external financing were examined.

The theoretical and empirical literature on capital structure was then examined in Chapter 3. Firstly, financial theories of capital structure including the static trade-off theory (Scott, 1972; Kraus and

Litzenberger, 1973; Kim, 1978), agency theory (Jensen and Meckling, 1976), the pecking order theory (Myers, 1984; Myers and Majluf, 1984) and the financial growth cycle theory (Berger and Udell, 1998) were presented. Following this empirical work on the firm level determinants of capital structure of SMEs was reviewed and a discussion was undertaken as to whether financial theories of capital structure fully explain how SMEs are financed. In particular previous work on SMEs from developing economies and larger Chinese firms was carefully scrutinised (Barton and Matthews, 1989; Matthews et al., 1994; Uzzi, 1999; Romano et al., 2000; Chen, 2004; Chen and Strange, 2005; Van Gennip, 2005; Huang and Song, 2006; Bhabra et al., 2008). Alternative theoretical perspectives that may help us to explain capital structure decision making were then introduced (Barton and Matthews, 1989; Matthews et al., 1994; Uzzi, 1999; Romano et al., 2000). A review of the literature led to the identification of a number of managerial determinants of capital structure not posited by financial theories. These were managerial strategy, psychology, human capital and network ties. In the final section of this chapter the methodological issues of the study were addressed with reference to the previous literature. In particular the choice of mixed methods research to investigate the phenomenon of SME financing was justified.

In Chapter 4 the firm-level determinants of capital structure were investigated through the quantitative analysis of firm-level data on 1539 SMEs in Zhejiang Province in the period 2004-2005. Firm size and firm age were found to be positively related, and profitability negatively related, to short-term and total leverage. Contrary to what was hypothesised evidence was found to suggest that the sole-trading enterprises in the sample had significantly greater debt in their capital structures than limited liability enterprises. This might be explained by the fact that sole-trading enterprises have greater access to informal financing sources than limited liability enterprises. Only one variable, age, was found to be significantly related to long-term leverage. This may result from the limited use of long-term debt by firms sampled. The analysis indicates an overwhelming reliance by Chinese SMEs on short-term leverage. Contrary to expectations no relationship was found between asset structure and all forms of leverage. This contradicts results of previous empirical work which tends to find evidence of a negative link between asset structure and short-term leverage and a positive relationship between asset structure and long-term leverage (Cassar, 2004; Huang and Song, 2006; Bhabra et al., 2008). However, further regressions using an interactive variable (INCAS) indicate that the relationship between asset structure

and leverage differs considerably between sole trading and limited liability enterprises in the sample. The relationship between asset structure and both short-term and total leverage was positively significant for limited liability enterprises in the sample, whereas for sole-trading enterprises it was negatively significant. This indicates that limited liability enterprises make greater use of formal financing than sole trading enterprises and suggests that the pecking-order theory might be applicable to explain the financing behaviour of limited liability SMEs in China. Three possible explanations are provided for differences in the asset structure/capital structure relationship between sole trading enterprises and limited liability enterprises.

One explanation is that sole-traders tend to be more informationally opaque than limited liability enterprises which results in the reluctance of banks to lend to them. Sole-traders also prefer financing mechanisms that do not require fixed assets as security, and are reluctant to borrow formally for the fear that they may be held personally responsible for loan default. They also have adequate access to finance through informal mechanisms which negates the need for them to utilise formal financing mechanisms. The results of this chapter are, to a certain extent, consistent with both the pecking-order and financial life-cycle theories of capital structure. The hypothesised determinants for the pecking-order theory hold true for the limited liability enterprises in the sample where a positive relationship between asset structure and both short-term and total leverage is borne out of the data, suggesting that the capital structure of enterprises varies along their lifecycle. Limited empirical support is provided for the static trade-off theory, indicating that decision makers in Chinese SMEs do not target a static optimal capital structure.

In Chapter 5 qualitative interviews were undertaken with key respondents to elaborate on the findings from Chapter 4 and investigate other determinants that could not be examined through quantitative analysis of the firm-level data. Analysis of interview data provided further support for the applicability of the pecking-order theory of financing to the Chinese SME context. Enterprises sampled tend to finance via internal sources before seeking external sources of finance. Bank financing is also used widely by enterprises sampled, especially larger SMEs with limited liability. In line with the findings from the previous chapter, the sampled firms financed overwhelmingly in the short-term. Interview data revealed this could be explained by the risk-averse behaviour of Chinese banks who view long-

term lending to SMEs as a risky proposition. The interview data also helped to explain the findings of a negative relationship between asset structure and capital structure for sole-trading enterprises in Chapter 4. Compared to limited liability enterprises the sole trading enterprises sampled tended to make less use of bank financing and made greater use of alternative forms of collateral than fixed assets when borrowing from the bank.

Findings from the data analysis also revealed limited reliance on informal financing mechanisms, especially by limited liability enterprises in the sample. For most firms in the sample informal borrowing via friends and family was only used in the early stages of business development. In contrast, trade credit and inter-firm financing continue to play an important role in the financing of many enterprises, suggesting that they are used as alternative financing mechanisms for firms shut out of formal financial markets. A significant number of firms revealed they also borrow from other firms in their business network when faced with financial difficulties, and use inter firm guarantees when they have insufficient assets of their own to pledge as security when borrowing from the bank. Semi-structured interviews established that government authorities have little direct influence over credit allocation from the banking sector. The decision to grant credit is generally taken at the bank level and tends to be dependent on the financial performance of the individual enterprise.

However, it was clear from the interviews that the government still had an important role to play in the financing of SMEs. A number of enterprises in the sample highlighted the importance of their relationships with government officials to the financing of their enterprises. Government officials, in many cases, play an important role in introducing senior managers of SMEs to bank officials. Finally the interviews also indicated that the control aversion of SMEs owner/managers may be a significant determinant of their financing decisions. Firms whose owner/managers were control averse are less likely to rely on external sources of debt financing to finance their business activities whereas growth-oriented firms tend to be less control averse and more willing to seek external financing.

In Chapter 6 of this study a theoretical model was developed which identified managerial factors influencing the capital structure adopted by SMEs, specifically the strategic objectives, psychology, human capital and network ties of owner/managers. The model was then tested through analysis of data

collected from a survey questionnaire of the owner/managers of SMEs. The analysis of survey data indicated that a combination of factors determined the financing behaviour of sampled firms. In particular the control aversion and risk propensity of owner/managers were found to strongly influence the capital structure adopted by SMEs. Contrary to what was hypothesised, the business objectives of owner/managers only had a limited influence of the financing decisions of SMEs. Firms whose owner/managers had greater growth intentions were more likely to make use of bank financing and firms whose owner/managers had greater profit maximisation intentions in the short-term were more likely to have higher amounts of short-term debt in their capital structure. The human capital of owner/managers also seemed to have little impact on the financing decisions of SMEs. Only managerial experience was found to be positively related to the amount of debt in the capital structure of sampled firms.

Surprisingly, network ties were found to have a negative relationship with leverage in sampled firms. This might be explained by the fact that firms with stronger network ties have less of a need for external financing due to higher levels of profitability and greater access to valuable information and business opportunities. They also showed greater control aversion than firms with weaker ties suggesting that although they have the ability to access greater amounts of external financing they do not necessarily do so due to the perception that it might result in loss of control over their business.

7.3 Theoretical and Empirical Contributions of this Study

This study makes a number of important contributions to the existing body of research. Empirically, it extends the examination of the firm-level determinants of capital structure to the Chinese SME context. Although previous studies focused on analysing the determinants of the capital structure of larger, listed firms (Chen, 2004; Chen and Strange, 2005; Tong and Green, 2005; Huang and Song, 2006; Bhabra et al., 2008), there has been limited focus in the literature on what determines the capital structure of SMEs. In Chapter 4 an important empirical contribution to the literature is provided by establishing that financial theories of capital structure do not provide a full explanation for how SMEs are financed. Although data analysis on firm level data from 1539 enterprises revealed some support for the pecking-order theory of capital structure, this was only for incorporated firms in the dataset. A number of possible explanations for the limited applicability of established theories of capital structure

to Chinese SMEs, especially to unincorporated firms, arising from China's unique institutional and cultural context, were provided. These include the discrimination that private enterprises continue to face from the banking sector, the availability of informal financing due to high savings rates and networks of trust between social and family groups, and the high levels of control aversion exhibited by SME owner/managers in China.

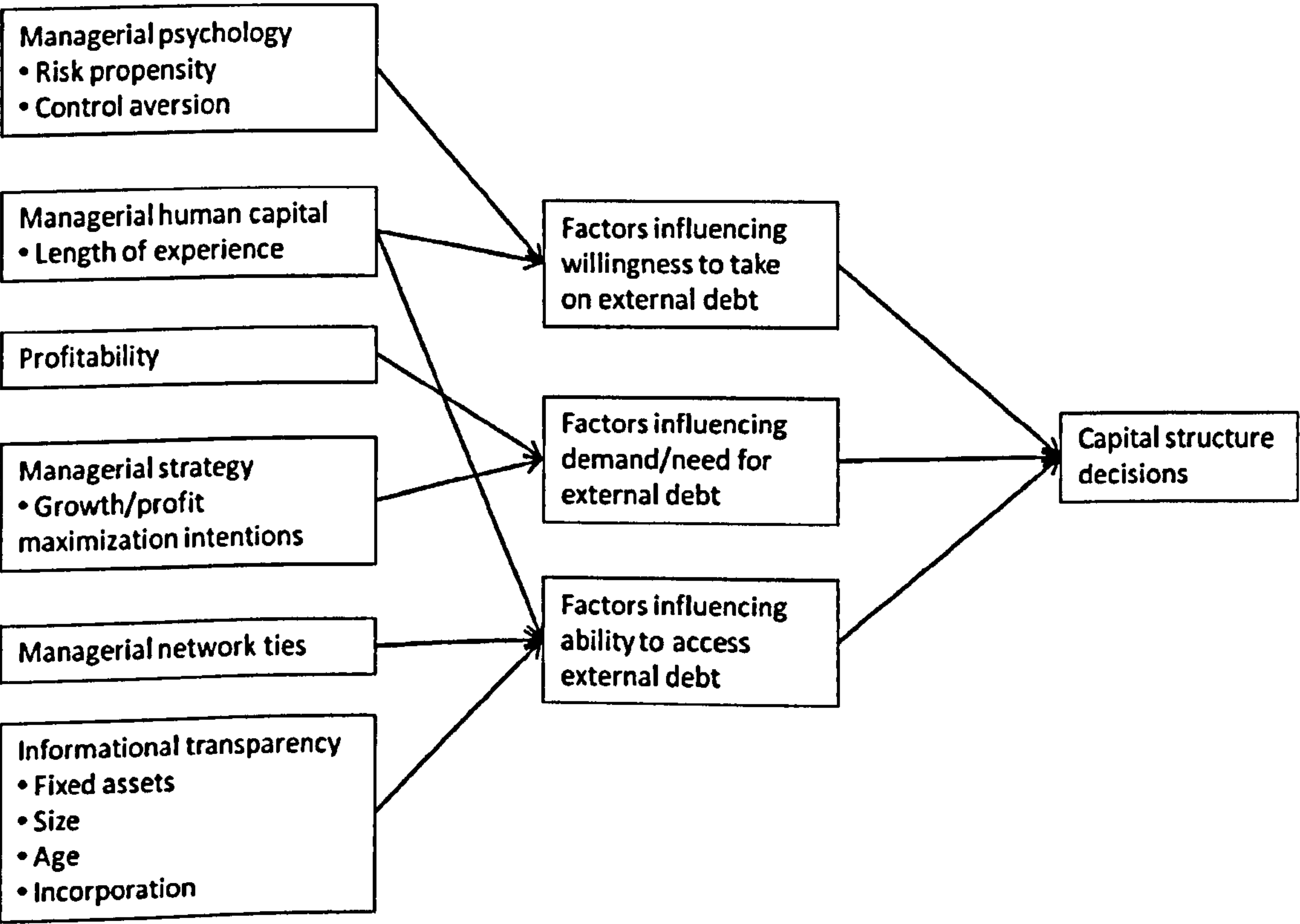
A second key contribution arose from understanding the influence of incorporation on the financing decisions of Chinese SMEs. Few studies, in the context of mature economies, have investigated whether incorporation leads to greater access to financing for SMEs (Storey, 1994; Coleman and Cohn, 2000; Cassar, 2004). Distinct differences were found in the capital structures of sole trading and limited liability enterprises in China. The analysis indicated that limited liability enterprises had greater access to formal financing mechanisms while sole traders had greater access to informal financing. Such findings suggest that the legal form adopted by Chinese SMEs is an important determinant of capital structure both directly and through its link to asset structure.

Another key contribution of this study is made in Chapters 5 and 6 through the development and testing of a theoretical model which provides a deeper understanding as to how managerial factors influence the capital structure decisions of Chinese SMEs. It highlighted the role played by managerial strategy, psychology, human capital and network ties in small business financing, factors which are not taken into account by existing theories of capital structure in the finance paradigm.

Based on the findings from the three empirical chapters of this study a theoretical framework is developed that combines divergent perspectives to explain the factors influencing capital structure decision making of SME's in China. It is presented in Figure 7.1. As well as firm-level variables, the framework includes managerial factors which were found to be important determinants of the capital structure of Chinese SMEs. Both firm and managerial-level antecedents can be split into three main categories; those which influence the willingness of decision-makers to take on external debt; those which influence the firm's demand/need for external debt; and those which influence the ability of the firm to take on external debt. Firstly, the psychology of managers, as regards their risk propensity and control aversion, and the length of managerial experience, are factors which determine their willingness

to take on external debt. Those firms whose senior managers are less control averse, more willing to take risks and more experienced are more likely to seek external debt. Secondly, the strategic objectives of senior managers and the availability of internal sources of finance, impacts on the firm's demand/need for external debt. Firms with limited growth intentions or adequate sources of internal funds are less likely to seek external debt than those with significant growth intentions or limited internal funds. Finally, a firm's ability to access debt depends on their network ties and levels of information transparency. Previous research indicates that younger, smaller and non-incorporated firms tend to suffer from higher levels of asymmetric information, making access to external debt relatively complicated. As a result those firms with strong network ties (relational capital) and fixed assets (financial capital) should find it easier to access external debt than those without.

Figure 7.1: Theoretical framework for capital structure decision-making



7.4 Methodological Contribution of this Study

This study makes a significant methodological contribution to the literature by adopting a mixed-methods approach to investigate the capital structure determinants of Chinese SMEs. Previous studies on SME financing have tended to rely overwhelmingly on the use of quantitative methods (Chen, 2004; Tong and Green, 2005; Van Gennip, 2005; Klapper et al., 2006; Huang and Song, 2006; Abor and Biekpe, 2007). In the early stages of research design it was recognised that there was a need to complement the findings from quantitative analysis of data with more focused qualitative work. This led to the use of semi-structured interviews in this study in order to gain a deeper understanding of the factors which influence the capital structure decisions of Chinese SMEs. Qualitative methods were used in addition to quantitative methods for two main reasons. The first was to generate more accurate results through the process of triangulation (Alexander et al., 2008). Specifically, the use of semi-structured interviews in Chapter 5 enabled a better understanding of the findings from quantitative analysis of data in Chapter 4. Secondly, qualitative methods were used to help inform the development of a survey questionnaire (Greene et al., 1989). Specifically, the findings from semi-structured interviews in Chapter 5 assisted in the development of a theoretical model which was subsequently tested through the design and distribution of a self-completion survey questionnaire in Chapter 6.

7.5 Policy Implications of this Study

Given the importance of the SME sector to economic development in China, in terms of its contribution to innovative activity, productivity improvements and job creation (Chen and Feng, 2000; Garnault et al., 2001; Anderson et al., 2003; Chen, 2006; Yang, 2004; Dougherty and Herd, 2005; Farrell et al., 2006) understanding what determines the capital structure of Chinese SMEs is a topic that deserves the attention of policy makers. This should allow them to best target their resources to support SME development and stimulate the private sector in the most effective way possible.

This study highlights a number of policy implications. While private SMEs are enjoying better access to formal financing mechanisms there are a significant proportion of private SMEs, especially those which are unincorporated, which continue to face difficulties in accessing adequate sources of external financing to support their growth. In order to improve this situation, the Chinese authorities should consider developing effective means by which to improve access to formal loan capital from financial

institutions, especially in the long-term. This can include further liberalisation of the financial sector to allow for greater competition between financial institutions in SME lending. If formal financial institutions are provided with greater room to innovate, investors will not need to rely on informal sources of finance to the same extent as they do at present (Li, 2009b).

The government should do more to encourage the growth of new financial institutions in the lending market such as city commercial banks, micro-credit providers, credit unions and credit cooperatives (Fagan and Zhao, 2009). This should lead to greater efficiency and competition in the banking system as a whole (Shen et al., 2009). This is especially important in rural areas of the country where the large state-owned banks have largely withdrawn from lending in recent years (He et al., 2009; Herd et al., 2010). Previous empirical studies reveal that smaller financial institutions, especially rural credit cooperatives, typically forward a greater proportion of their credit to SMEs (Shen et al., 2009; Herd et al., 2010). This is due to the fact that smaller financial institutions are less hierarchical, independent of political considerations and more profit-oriented (Gregory et al., 2000; Shen et al., 2009). They also tend to focus on segments of the market that have been neglected by larger financial institutions, and do not discriminate against customers on the basis of their previous relationships. As a result they are more likely to be open to developing innovative ways to lend to the SME sector.

In order to encourage the entrance of new financial institutions, especially in rural areas of the country, local governments should remove regulatory barriers that discourage market entry such as high registered capital requirements. Although the central government lowered the minimum capital requirements for rural lending institutions in 2006 many local governments continue to adopt minimum capital requirements for new entrants much higher than those stipulated by the central government (He et al., 2009). For example, regulatory provisions require new financial institutions registering in Beijing to have ten times the amount of registered capital required by the regulatory authorities. The central government should do more to ensure that local governments abide by their minimum requirements.

More could be done to encourage foreign banks to establish a greater presence in China, especially in rural areas of the country where they have limited market share, as foreign market entry has been shown to lead to increased lending to SMEs (Leigh and Podpiera, 2006). In order to achieve this,

policy makers should consider removing the regulatory restrictions faced by foreign banks from investing in rural credit cooperatives (He et al., 2009).

National and local governments should also consider the development of effective credit rating and guarantee schemes for SMEs, which should reduce the costs to financial institutions of screening loan applications, and reduce the asymmetric information between lenders and borrowers. Such schemes have been shown to have a significant impact on SME access to credit (Herd et al., 2010). Although the government has tried to develop credit guarantee schemes in the past these schemes have generally not worked due to significant red tape and a lack of ongoing financial support from government (Mu, 2002; He et al., 2009). Compared to other countries guarantees are infrequently used by Chinese SMEs (He et al., 2009). According to recent research only 1 per cent of SME lending is guaranteed, compared with 20 per cent in Korea and 40 per cent in Japan (Asian Development Bank, 2007). In the future, emphasis should be placed on making guarantee schemes more straightforward and less bureaucratic. The government authorities should also provide greater financial backing to guarantee schemes. This should allow businesses with a limited track record, to seek adequate financing to support their early stages of their development.

Greater effort should also be made to improve SME access to the equity markets as they are over-reliant on bank-based financing compared to their counterparts in mature economies. At present, the Chinese government continues to control IPO approval and timing which results in state-owned enterprises dominating new IPOs (Herd et al., 2010). The administrative and financial requirements placed on firms looking to gain entry to the Chinese stock market cannot be met by most SMEs (Fagan and Zhao, 2009). Feasibly, they are only able to seek market listing on the Shenzhen SME bourses and overseas stock markets. In order to improve the ability of SMEs to seek external equity financing the Chinese government could follow the example of other countries and create new bourses which serve a wider variety of financing needs. They should also move to a system in which firms are given more autonomy in the IPO process as this has been shown to improve the quality and diversity of listed companies (Herd et al., 2010).

The government should also consider introducing reforms to develop the corporate bond market as an

alternative financing mechanism for SMEs. At present, it is extremely difficult for non-listed SMEs to issue bonds due to regulatory restrictions (He et al., 2009). Until recently bank guarantees were required as security for issued bonds meaning that bond issuers were largely limited to large state-owned enterprises (Herd et al., 2010).

The control and risk aversion of owner/managers leads to a reluctance on the part of many SMEs to seek external capital from financial institutions. The government authorities should be aware of how such behaviour impacts on the development of the SME sector when developing policies aimed at supporting the SME sector. They should refrain from simply providing blanket measures to support the whole population of SMEs, regardless of their demand for external financing, and concentrate on providing specific support for those enterprises that need it the most and are actively demanding it. These enterprises tend to be in their early stages of development and suffer from significant levels of asymmetric information with their potential lenders due to a lack of historical financial data on which their creditworthiness can be ascertained. Industry specific factors should also be taken into account in the development of policies to support the SME sector (Berggren et al., 2000). Compared to traditional industries, firms operating in new innovative industries with significant potential for growth will need greater support due to their short history, which leads to significant levels of asymmetric information between them and their lenders.

Policy makers should also consider what can be done to incentivise SMEs to be more transparent in their financial dealings and adopt more formal accounting systems. This should assist them in getting better access to external sources of finance and could be done in a number of ways. Initially, the accounting regulations could be further strengthened in order to ensure more accurate financial reporting by SMEs. Local governments should also consider providing training programmes to help enterprises develop more formal management and accounting systems (Fagan and Zhao, 2009). These should improve the ability of financial institutions to assess creditworthiness of loan applicants from the SME sector.

A systematic effort should also be made to reduce the discrimination faced by private enterprises, especially as regards the levy of arbitrary and non-transparent fees and the payment of higher tax rates

than state-owned enterprises (Gregory et al., 2000; Fagan and Zhao, 2009). This kind of discrimination leads to reluctance on the part of business owners to fully disclose their true financial position to the government authorities for the fear that they may be the target of rent-seeking behaviour by government officials and arbitrary taxation by government departments.

7.6 Managerial Implications of this Study

In order for SMEs to obtain sufficient capital to finance their business operations it is important for their decision makers to be aware of the factors which may influence their capital structure. Based on the findings of the previous chapters the managerial implications of this study for the owner/managers of Chinese SMEs are highlighted.

High levels of asymmetric information between SMEs and their lenders constrain firms from accessing adequate sources of external capital from financial institutions. This is especially true for unincorporated enterprises that are under less stringent financial reporting requirements. Managers who are seeking formal sources of finance should be aware of the importance placed by financiers on financial information and past performance when making lending decisions. In order to improve access to external sources of debt and equity financing they should take steps to improve their accounting systems and processes. This should allow potential financiers to fully assess their true financial position.

High levels of control and risk aversion significantly affect the ability of SMEs to access adequate sources of external financing. SME managers must recognise that in order to fund rapid growth they must consider taking on external debt. This is especially important in new, high growth industries in which those who move the quickest are able to build market share quickly and benefit from economies of scale, allowing them to build a competitive advantage. SME owner/managers, who are inherently control and risk averse must be aware of how their behaviour may impact negatively on the competitiveness of their business in the long-term, especially if their competitors are open to taking on external capital to fund rapid business growth.

The importance of building strong network ties for Chinese SMEs must not be underestimated. The research findings suggest that SMEs with stronger network ties with the government, banks and other

firms are generally more profitable than firms with weaker ties. This reduces the need for them to seek external debt financing, leading to lower amounts of debt in their capital structure. To improve their network ties owner/managers might undertake a number of strategies. Seeking membership of the Communist Party and business associations might be one way in which they could do this.

7.7 Implications of this Study for Financial Institutions

Finally, implications can be drawn from the findings of this study for financial institutions engaging in lending to the SME sector. At present many SMEs are put off from seeking loan capital from financial institutions due to high levels of scrutiny and strict lending requirements. Banks and other financial institutions must consider developing flexible lending criteria for SMEs. They should recognise the impact that strict lending criteria might have on SMEs and consider changing their lending policies according to suit the individual circumstances of the firm and the characteristics of the industry in which the firm operates. Instead of solely assessing the creditworthiness of the firm by looking at its past financial performance, they might consider placing greater weight on other factors such as its growth potential and the viability of its future business plans. Financial institutions might also consider broadening the range of items they accept as collateral (Fagan and Zhao, 2009). At present banks typically only accept fixed assets as security on loans, and regulations prevent the use of receivables, inventory and equipment as collateral (Herd et al., 2010).

7.8 Limitations of Present Study and Suggestions for Future Research

The fact that this study only examined the determinants of capital structure of private SMEs in one Chinese province brings into question the generalisability of its findings to the whole of China. Previous research conducted in the late 1990s that there are considerable differences between provinces in the ways in which SMEs are financed (Gregory et al., 2000). It is hoped that future research may address these deficiencies by controlling for regional differences. Despite these concerns, the fact that Zhejiang Province is at the forefront of private sector development in China and has the highest percentage of GDP accounted for by private sector activity made this an ideal setting for this research study. In order to demonstrate whether the research findings are generalisable to the whole of China follow-up research would need to be conducted across a number of provinces. At present resources

limitations and difficulties in accessing data from all Chinese provinces make this a difficult proposition. Perhaps with greater access to resources and firm-level datasets such research might become viable in the future.

In addition, the present study only examined the determinants of capital structure for private SMEs. The extent to which the findings of this study are applicable to other organisational forms are still to be established. Previous work, for example, indicates considerable differences between the financing behaviour of state-owned and private firms in China (Li et al., 2009). Future work may examine whether the findings of this study, as regards the capital structure determinants of SMEs are replicable to SMEs with different ownership characteristics.

The lack of longitudinal data also made it difficult to investigate such variables such as growth and risk which had been found to determine the capital structure of enterprises in other contexts (Cassar and Holmes, 2004). A lack of longitudinal data also made it difficult to determine whether the determinants of capital structure may change over time. In order to reduce these concerns future research could utilise longitudinal data to examine the replicability of the findings over a longer time frame. This should allow us to better ascertain the applicability of the pecking-order and lifecycle theories. Indeed previous longitudinal research suggests that firms may have different pecking-orders depending on the evolutionary experiences of the firm and its owner/managers (Atherton, 2009). The lack of longitudinal data also made it difficult to use more sophisticated methods to analysis firm-level data in chapter 5. If longitudinal data had been available a series of robustness checks could have been performed through the use of fixed-effects or GMM regressions. This would have enabled the concerns of firm-specific heterogeneity and potential endogeneity of the independent variables to be addressed.

Future work might also extend the work in this study to SMEs in other developing economies. This will allow for further testing as to whether institutional differences impact on how SME are financed. Research investigating the capital structure determinants of Indian SMEs might be of some interest considering the fact that India, in addition to China, is one of the largest and most dynamic economies in Asia.

APPENDICES

Appendix 1

Interview Script

1. Please introduce your business.
 - What industry do you operate in?
 - How long have you been running this business?
 - Is it a family business?
 - What did you do before you started your business?
 - What is your educational/professional background?
2. What are the main financing needs of your business?
 - Are they mostly short-term or long term financing needs?
3. What sources of finance does your company mainly use?
 - How important are internal sources of finance to you business?
 - How important are external sources of finance to your business?
 - What factors affect the sources of finance you use?
 - Have the sources of finance used by your business changed as your business has grown in size?
4. Do you feel constrained in your ability to access external sources of finance?
 - If so, explain the difficulties faced in accessing external sources of finance
5. We have noticed that SMEs rely heavily on short-term financing.
 - Is this the case for your business?
 - If so, what explanation is there such a high prevalence of short-term financing compared to long-term financing?
6. What are your major strategic objectives for your business?
 - How do your strategic objectives impact on how you finance your business?
7. Are you willing to take on new owner/partners in return for quicker growth of your business?
8. How important do you consider the building of good relationships with external financiers, including banks and venture capitalists to the future success of your business?
9. How important do you consider building relationships with other firms (customers and suppliers) in accessing financing?
10. Are you a member of any political organisations?
 - Do you think political participation improves the ability of private enterprises to access external sources of finance?

SME Financing Questionnaire
International Business Division
The University of Nottingham

International Business
Division
The University of
Nottingham
199 East Taikang Road
Ningbo

Questionnaire

Dear Participant

We are undertaking research on the sources of funding and barriers to finance of small and medium-sized enterprises (SMEs) in Ningbo. To help in this research, we would like to request that you complete the attached questionnaire. The validity of the questions will increase if all questions are answered completely and accurately. We wish to stress that all replies to the questions will be treated in the strictest confidence. Neither you nor your organisation will be identified at any stage of the analysis, nor in the publication of the results.

We have a number of aims in carrying out the research, but we are particularly interested to know about how owners of small and medium-sized enterprises in Ningbo finance their businesses and the barriers they face in raising finance. This will enable the government to provide more support for the financing of small and medium-sized enterprises.

The questionnaire should only take a short time to fill in, but your answers will be enormously valuable to the research project. When the analysis is complete we will be pleased to send you a summary of the findings.

Any questions regarding this project may be directed to Alex Newman (contact: **0547 88180110**, alex.newman@nottingham.edu.cn)

Thank you very much for your interest and time in helping to make this study possible.

Alex Newman
Teaching Fellow in International Business

SECTION A

Sources of Finance

Please indicate the importance of the following sources of finance to your firm using the scale below to circle the appropriate number from 1 to 5.

1		2	3	4	5				
Not Important		Limited Importance	Somewhat Important	Important	Very Important				
1	Retained profits				1	2	3	4	5
2	New equity from the owners/directors and their family members				1	2	3	4	5
3	Loans from the owners/directors and their family members				1	2	3	4	5
4	Bank loans				1	2	3	4	5
5	Loans from friends				1	2	3	4	5
6	Loans from credit networks/money lenders				1	2	3	4	5
7	Loans from other informal sources				1	2	3	4	5
8	Government loans				1	2	3	4	5
9	Trade credit				1	2	3	4	5
10	Venture capital funds				1	2	3	4	5
11	Equity from outside investors				1	2	3	4	5
12	Leasing				1	2	3	4	5

Please indicate the approximate percentage of total financing provided by each of the following sources of finance

1	Retained profits	%
2	New equity from the owners/directors and their family members	%
3	Loans from the owners/directors and their family members	%
4	Bank loans	%
5	Loans from friends	%
6	Loans from credit networks/money lenders	%
7	Loans from other informal sources	%
8	Government loans	%
9	Trade credit	%
10	Venture capital funds	%
11	Equity from outside investors	%
12	Leasing	%

SECTION B

Barriers to Finance

Please indicate the extent to which you consider the following factors to be a barrier to raising finance for your business by using the scale below to circle the appropriate number from 1 to 5.

1		2		3		4		5		
No Barrier								Serious Barrier		
1	High interest rates charged by banks					1	2	3	4	5
2	Collateral requirements of banks					1	2	3	4	5
3	Length of time required to get a loan					1	2	3	4	5
4	Poor accounting records					1	2	3	4	5

SECTION C

Relationships with Banks

1. What is the length of the relationship your firm has with its main bank? _____ years
2. How many banks does your firm have a banking relationship with? _____ banks
3. How often do you discuss your financial position with your bank(s)
- Daily ☐

Weekly ☐

Monthly ☐

Quarterly ☐

Yearly ☐

Only when a loan is needed ☐

SECTION D

Network Resources

Please indicate the extent to which you agree or disagree with each of the following statements by using the scale below to circle the appropriate number from 1 to 5.

	1	2	3	4	5
	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1	We have many close relationships with other firms				12345
2	We have very good business relationships with local government officers				12345
3	We have very good business relationships with banks				12345
4	We are satisfied with the relationship we have with our banks				12345

SECTION E

Business Objectives

Please indicate the extent to which you agree or disagree with each of the following statements by using the scale below to circle the appropriate number from 1 to 5.

	1	2	3	4	5
	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1	One of our major objectives is to increase market share as quickly as possible				12345
2	One of our major objectives is to maximise profits in the short-term				12345

SECTION F

External Financing

Please indicate the extent to which you agree or disagree with each of the following statements by using the scale below to circle the appropriate number from 1 to 5.

1		2		3		4		5			
Strongly Disagree		Disagree		Neither Agree Nor Disagree		Agree		Strongly Agree			
1	We intend to retain a majority stake in the business for the founders.						1	2	3	4	5
2	It is important to take risks when doing business						1	2	3	4	5

SECTION G

Firm Information

Please remember that **your responses are completely anonymous.**

1. Age of firm _____ years
2. Is your firm family controlled (i.e. does one family own more than 50 percent of the shares)?
Yes ☐ No ☐
3. In which industrial sector is your firm?
Retail ☐ Manufacturing ☐
Hotel/restaurant ☐ Financial services ☐
Consultancy ☐ Building and construction ☐
Transport ☐ Other (Please Specify)
4. Number of employees _____
5. Form of business ownership (please tick as appropriate)
Limited company ☐ Sole proprietor ☐
Partnership ☐ Other (Please Specify)
6. Have the number of employees working at your firm increased in the last financial year?
Yes ☐ No ☐
7. Total revenue in the last financial year _____
8. Total assets in the last financial year _____
9. Fixed assets in the last financial year _____

10. Total liabilities in the last financial year _____
11. Short-term liabilities in the last financial year _____
12. Total profits in the last financial year (indicate losses with a negative sign) _____
13. Did your firm have an initial written business plan at the time you started the business?
Yes ☐ No ☐
14. If yes to question 13, did you get advice when writing the business plan?
Yes ☐ No ☐
15. If yes to question 14, who gave you advice when writing the business plan?
Bankers ☐ Consultants ☐
Friends ☐ Other (Please Specify)

SECTION H

Personal Characteristics of CEO

Please remember that **your responses are completely anonymous.**

1. Gender of CEO (please tick as appropriate)
Male ☐ Female ☐
2. Age of CEO _____ years
3. Education of CEO (please tick the category that describes the highest level completed or degree received).
Middle school or lower ☐ High school certificate ☐
Bachelor's degree ☐ Master's degree ☐
PhD ☐
4. How long has the present CEO been CEO of the firm? _____ years
5. Did the CEO have previous managerial experience in the same industry before joining or establishing your existing company?
Yes ☐ No ☐
6. If yes, how many years of managerial experience did he/she have before joining or establishing the present firm? _____ years
7. Is the CEO a member of any of the following organisations (please tick as appropriate)
Communist Party ☐ People's Political Consultative Committee ☐
People's Congress ☐ Private Entrepreneur's Association ☐
Private Business Association ☐

Thank you very much for taking the time to complete this questionnaire



中小企业融资问卷调查

国际商学院

宁波诺丁汉大学

问卷调查表

国际商学院

宁波诺丁汉大学

宁波市泰康东路199号

致尊敬的调查参与者：

我们正在开展关于浙江中小企业融资来源以及融资过程中所遇到的障碍问题的调查。为了协助这次调查，我们希望请您能完成所附的问卷。如果您能完整并准确地回答问卷中的所有问题，将增强这份问卷调查的有效性。我们希望在此强调：您所有的回答都将得到最严格的保密。您和您的企业在此次调查的任何一个阶段都将是匿名的（不会被识别），包括在此次研究结果公开发表时也不会被透露。

我们希望通过这次调查达到许多目标，但是我们特别希望了解的是浙江的中小企业主们如何为他们的生意融资以及在融资过程中所遇到的障碍。这项研究将会有助于政府将来为中小企业融资提供更多的支持。

完成这次问卷只需花费您少量的时间，但您所提供的信息对我们的研究将极富价值。当此次调查研究完成时，我们将很荣幸地寄给您一份我们研究发现的总结报告。

关于本次研究项目的任何问题，您都可以直接联系Alex Newman（联系电话：**0547 88180110**，电子邮件：alex.newman@nottingham.edu.cn）

诚挚感谢您对本次研究的兴趣和您的时间。

Alex Newman

国际商务助教

第一部分
融资来源

请在以下刻度表里从1到5的数字中圈出您认为合适的数字，以显示下列融资来源对于您企业的重要程度。

1	2	3	4	5
不重要	有些重要	比较重要	重要	非常重要
1	留存利润			12345
2	来自所有者和所有者家庭成员的新股本资金			12345
3	来自所有者和所有者家庭成员的贷款			12345
4	银行贷款			12345
5	来自朋友的贷款			12345
6	来自信用网络/放债者的贷款			12345
7	来自其它渠道的非正式贷款			12345
8	政府贷款			12345
9	商业信贷			12345
10	风险投资基金			12345
11	来自外部投资者的股本资金			12345
12	融资租赁			12345

请写明以下融资来源占总融资的大致比例。

1	留存利润	%
2	来自所有者和所有者家庭成员的新股本资金	%
3	来自所有者和所有者家庭成员的贷款	%
4	银行贷款	%
5	来自朋友的贷款	%
6	来自信用网络/放债者的贷款	%
7	来自其它渠道的非正式贷款	%
8	政府贷款	%
9	商业信贷	%
10	风险投资基金	%
11	来自外部投资者的股本资金	%
12	融资租赁	%

第二部分

获取融资时的障碍

请在以下刻度表里从1到5的数字中圈出您认为合适的数字，以显示这些因素对您获得融资的制约程度。

1	2	3	4	5
不产生制约	非常有限的制约	有限的制约	严重的制约	非常严重的制约
1	银行所收取的高贷款利率			12345
2	银行的抵押要求			12345
3	获得贷款所花费的时间			12345
4	不良的过往会计记录			12345

第三部分
与银行的关系

1. 您的公司和主要合作银行的业务关系保持了多久? _____ 年
2. 您的公司和多少家银行有业务（借贷）关系? _____ 家（银行）
3. 您每隔多久与您的银行讨论您公司的财务状况
- 每天 ☐

每周 ☐

每月 ☐

每季度 ☐

每年 ☐

只在需要申请贷款时 ☐

第四部分
外部关系/社会资本

请在以下刻度表里从1到5的数字中圈出您认为合适的数字，以显示您对以下各表述的赞成或反对程度。

1		2		3		4		5		
强烈反对		反对		中立		同意		非常同意		
1	我们和很多其他公司有紧密的关系					1	2	3	4	5
2	我们和当地的政府官员有良好的商业合作关系					1	2	3	4	5
3	我们和银行有良好的商业合作关系					1	2	3	4	5
4	我们对现在和银行的关系感到满意					1	2	3	4	5

第五部分
企业目标

请在以下刻度表里从1到5的数字中圈出您认为合适的数字，以显示您对以下各表述的赞成或反对程度。

1	2	3	4	5
强烈反对	反对	中立	同意	非常同意
1	我们主要的目标之一是尽快增加市场份额			12345
2	我们主要的目标之一是在短期内最大化利润			12345

第六部分
外部融资

请在以下刻度表里从1到5的数字中圈出您认为合适的数字，以显示您对以下各表述的赞成或反对程度。

1	2	3	4	5
强烈反对	反对	中立	同意	非常同意
1	我们倾向于保留创始人在企业中的绝对多数股份。			12345
2	承担风险对于经营企业来说很重要。			12345

第七部分
企业信息

请注意：您在此提供的任何信息都将是完全匿名的。

1. 您的企业已经建立的时间 _____ 年

2. 您的企业是否属于家族企业 (即： 一个家庭是否拥有50%以上的股份)?
是 ☐ 否 ☐

3. 您的企业所在的行业?

零售业	<input type="checkbox"/>	制造业	<input type="checkbox"/>
酒店/旅馆业	<input type="checkbox"/>	金融服务业	<input type="checkbox"/>
咨询	<input type="checkbox"/>	建筑业	<input type="checkbox"/>
运输业	<input type="checkbox"/>	其他行业 (请注明)	

4. 员工人数 _____

5. 所有制形式 (请勾选合适的选项)

有限责任公司	<input type="checkbox"/>	个体户	<input type="checkbox"/>
合伙/合营公司	<input type="checkbox"/>	其他形式 (请注明)	

6. 在上一个财政年度，您所在公司的员工数目是否有所增加?
是 ☐ 否 ☐

7. 上一个财政年度的总收入 _____

8. 上一个财政年度的总资产 _____

9. 上一个财政年度的总固定资产 _____

10. 上一个财政年度的总负债 _____

11. 上一个财政年度的短期负债 _____

12. 上一个财政年度的总利润 (如亏损，请在数字前用 ‘-’ 号来标注) _____

13. 在您创立企业之初，是否有书面的商业计划书?
有 ☐ 没有 ☐

14. 如果您对第13题的回答是 ‘有’，您在起草商业计划书时有没有得到他人的建议?
有 ☐ 没有 ☐

15. 如果您对第14题的回答是 ‘有’，谁给你提供了建议?

- 银行 ☐ 咨询师 ☐
朋友 ☐ 其他(请指明)

第八部分

首席执行官的个人特征

请注意：您在此提供的任何信息都将是完全匿名的。

1. 首席执行官的性别 (请勾选合适的选项)

男性 ☐ 女性 ☐

2. 首席执行官的年龄 _____ 岁

3. 首席执行官的受教育程度(请勾选所受过的最高程度的教育).

初中或以下 ☐ 高中 ☐
学士学位 (本科) ☐ 硕士学位 (研究生) ☐
博士学位 ☐

9. 现任首席执行官在任的年数? _____ 年

10. 再加入或者创立您的公司之前，现任首席执行官是否拥有在同行业中的管理经验?

有 ☐ 没有 ☐

13. 如果有经验，他/她在加入或者创立您的公司之前拥有多少年的同行业管理经验?

_____ 年

14. 首席执行官是否是下列一个或多个组织的成员 (请勾选合适的选项，可多选)

中国共产党 ☐ 中国人民政治协商会议 ☐
中国人民代表大会 ☐ 私营企业家协会 ☐
私营企业联合会 ☐

万分感谢您抽出宝贵时间来完成本次调查问卷.

REFERENCES

- Abor, J. and Biekpe, N. (2007) Small business reliance on bank financing in Ghana. *Emerging Markets Finance and Trade* 43(4): 93-102.
- Ahlstrom, D. and Bruton, G. (2006) Venture capital in emerging economies: Networks and institutional change. *Entrepreneurship, Theory and Practice* 30(2): 299-320.
- Ahlstrom, D. Bruton, G. and Yeh, K. (2007) Venture capital in China: past, present and future. *Asia Pacific Journal of Management*, 24: 247–268.
- Alexander, V.D. Thomas, H. Cronin, A. Fielding, J. and Moran-Ellis, J. (2008) Mixed methods. In: Gilbert, N. (Ed.) *Researching social life*. London: Sage.
- Allen, F. Qian, J. and Qian, M. (2005) Law, finance, and economic growth in China. *Journal of Financial Economics* 77: 57–116.
- Allum, N. and Arber, S. (2008) Secondary analysis of survey data. In Gilbert, N. (Ed.) *Researching social life*. London: Sage.
- Alston, J.P. (1989) Wa, guanxi and inhwa: Managerial principles in Japan, China and Korea. *Business Horizons* 32(2): 26-31.
- Anderson, A. Li, J. Harrison, R and Robson, P. (2003) The increasing role of small business in the Chinese economy. *Journal of Small Business Management* 41(3): 310-316.
- Ang, J. S. (1991) Small business uniqueness and the theory of financial management. *The Journal of Small Business Finance* 1(1): 1-13.
- Ang, J. S. (1992) On the theory of finance for privately held firms. *The Journal of Small Business Finance* 1(3) 185-203.
- Anonymous (2006) *The SME financing gap: Volume 1 theory and evidence*. OECD: Paris.
- Anonymous (2007) *Zhejiang statistical yearbook*. Beijing: China Statistics Press.
- Arber, S. (2003) Secondary analysis of survey data. In Gilbert, N. (Ed.) *Researching social life*. Newbury Park, London: Sage.
- Areddy, J.T. (2006) Venture capital floods China. *The Wall Street Journal Asia*. 15th March, 19–20.
- Arksey, H. and Knight, P. (1999) *Interviewing for social scientists*. London: Sage Publications.
- Asian Development Bank (2007) *People's Republic of China: Development of small and medium-sized enterprise credit guarantee companies, technical assistance report 4350*. Beijing: ADB.

- Atherton, A. (2008) From “fat pigs” and “red hats” to a “new social stratum”: The changing face of enterprise development policy in China. *Journal of Small Business and Enterprise Development* 15(4): 640-655.
- Atherton, A. (2009) Rational actors, knowledgeable agents: Extending pecking order considerations of new venture financing to incorporate founder experience, knowledge and networks. *International Small Business Journal* 27(4): 470-495.
- Ayyagari, M. Demirguc-Kunt, A. Maksimovic, V. (2008) Formal versus informal finance: Evidence from China, Working Paper No 4665. Washington: The World Bank.
- Aziz, J. and Duenwald, C. (2002) Growth-financial intermediation nexus in China. *International Monetary Fund Discussion Paper* No. 02/194. Washington: IMF.
- Bai, C.E. Lu, J. and Tao, Z. (2006) Property rights protection and access to bank loans: Evidence from private enterprises in China. *Economics of Transition*, 14(4): 611-628.
- Barney, J. (1991) Firm resources and the theory of competitive advantage. *Journal of Management* 17(1): 99-120.
- Barton, S.L. and Gordon, P.J. (1987) Corporate strategy: Useful perspective for the study of capital structure? *Academy of Management Review* 12(1): 67-75.
- Barton, S.L. and Gordon, P.J. (1988) Corporate strategy and capital structure. *Strategic Management Journal* 9(6): 623-632.
- Barton, S.L. and Matthews, C.H. (1989) Small firm financing: Implications from a strategic management perspective. *Journal of Small Business Management*, 27(1): 1-7.
- Batjargal, B. and Liu, M. (2002) Entrepreneurs’ access to private equity in China: The role of social capital. *Organisation Science* 15(2): 159-172.
- Bates, T. (1990) Entrepreneur human capital inputs and small business longevity. *Journal of Economics and Statistics* 7(4): 551-559.
- Bates, T. (1997) Financing small business creation: The case of Chinese and Korean immigrant entrepreneurs. *Journal of Business Venturing* 12(2): 109-124.
- Batra, G. Kaufmann, D. and Stone, A.H.W. (2003) Investment climate around the world: Voices of firms from the world business environment survey. Washington: World Bank.
- Becchetti, L. and Trovato, G. (2002) The determinants of growth for small and medium sized firms. The role of the availability of external finance. *Small Business Economics* 19(4): 291-306.

- Bell, K. and Vos, E. (2009) SME capital structure: The dominance of demand factors. SSRN Working Paper.
- Berger, A.N. and Udell, G.F. (1995) Relationship lending and lines of credit in small firm finance. *Journal of Business* 68(3): 351-381.
- Berger, A. N. and Udell, G. F. (1998) The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance* 22(6–8): 613–673.
- Berger, A. N. and Udell, G. F. (2002) Small business credit availability and relationship lending: The importance of bank organizational structure. *The Economic Journal* 112: F32–F55.
- Berggren, B. Olofsson, C. and Silver, L. (2000) Control aversion and the search for external financing in Swedish SMEs. *Small Business Economics* 15: 233-242.
- Berry, A. Rodriguez, E. and Sandee, H. (2001) Small and medium enterprise dynamics in Indonesia. *Bulletin of Indonesian Economic Studies* 37(3): 363–84.
- Bhabra, H.S. Liu, T. and Tirtiroglu, D. (2008) Capital structure choice in a nascent market: Evidence from listed firms in China. *Financial Management*, Summer: 341-364.
- Bhaired, C.M.A. and Lucey, B. (2006) Capital structure and the financing of SMEs: Empirical evidence from an Irish survey, working paper for conference ‘Entrepreneurship: occupational choice and financing. Copenhagen: Centre for Economic and Business Research.
- Bhaired, C.M.A. and Lucey, B. (Forthcoming) Determinants of capital structure in Irish SMEs, *Small Business Economics*.
- Biais, B. and Glollier, C. (1997) Trade credit and credit rationing. *Review of Financial Studies* 10(4): 903-937.
- Binks, M.R. and Ennew, C.T. (1996) Growing firms and the credit constraint. *Small Business Economics* 8(1): 17-25.
- Binks, M.R. and Ennew, C.T. (1997) The relationship between UK banks and their small business customers. *Small Business Economics* 9(1): 167–178.
- Bodenhorn, H. (2003) Short-term loans and long-term relationships: Relationship lending in early America. *Journal of Money, Credit and Banking* 35(4): 485-505.
- Booth, L. Aivazian, V. Demirguc-Kunt, A. and Maksimovic, V. (2001) Capital structure in developing countries. *Journal of Finance* 56(1): 87-130.

- Boyer, P. and Roth, H. (1976) The cost of equity finance for small business. *American Journal of Small Business* 1(2): 1-11
- Bradley, M. Jarrell, G.A. and Kim, E.H. (1984) On the existence of an optimal capital structure: Theory and evidence. *Journal of Finance* 39(3): 857-878.
- Brandt, L. and Li, H. (2003) Bank discrimination in transition economies: Ideology, information and incentives? *Journal of Comparative Economics* 31: 387-413.
- Brandt, L. and Zhu, X. (2007) The Chinese banking sector: Problems and solutions. In Calomiris, C. (Ed.) *China's financial transition at a crossroads*. New York: Columbia University Press.
- Brislin, R. (1993) *Understanding culture's influence on behaviour*. Fort Worth: Harcourt Brace College Publishers.
- Bruno, A.V. and Tyebjee, T.T. (1985) The entrepreneur's search for capital. *Journal of Business Venturing* 1(1): 61-74.
- Bruton, G.D. and Ahlstrom, D. (2003) An institutional view of China's venture capital industry: Explaining the differences between China and the West. *Journal of Business Venturing* 18: 233-259.
- Bryman, A. (2008) *Social research methods*. Oxford: Oxford University Press.
- Carlson, D.S., Upton, N. and Seaman, S. (2006) The impact of human resource practices and compensation design on performance: An analysis of family-owned SMEs. *Journal of Small Business Management* 44(4): 531-543.
- Carlisle, E. and Flynn, D. (2005) Small business survival in China: Guanxi, legitimacy and social capital. *Journal of Developmental Entrepreneurship* 10(1): 79-96.
- Cassar, G. (2004) The financing of business start-ups. *Journal of Business Venturing* 19: 261-283.
- Cassar, G. and Holmes, S. (2003) Capital structure and financing of SMEs: Australian evidence. *Accounting and Finance* 43: 123-147.
- Castanias, R. (1983) Bankruptcy risk and optimal capital structure. *The Journal of Finance*. 38(5): 1617-1635.
- Chan, Y.S. and Kanatas, G. (1985) Asymmetric valuations and the role of collateral in loan agreements. *Journal of Money, Credit and Banking* 17(1): 84-95.
- Chandler, G.N. and Hanks, S.H. (1998) An examination of the substitutability of founders human and financial capital in emerging business ventures. *Journal of Business Venturing* 13(5): 353-369.

- Chen, J. (2006) Development of Chinese small and medium-sized enterprises. *Journal of Small Business and Enterprise Development* 13(2): 140-147.
- Chen, J.J. (2004) Determinants of capital structure of Chinese listed companies. *Journal of Business Research* 57(12): 1341-1351.
- Chen, Z.X. Aryee, S. and Lee, C. (2005) Test of a mediation model of perceived organizational support. *Journal of Vocational Behavior* 66: 457-470.
- Chen, B. and Feng, Y. (2000) Determinants of economic growth in China: Private enterprise, education and openness. *China Economic Review* 11(1): 1-15.
- Chen, J. and Strange, R. (2005) The determinants of capital structure: Evidence from Chinese listed companies. *Economic Change and Restructuring* 38: 11-35.
- Chindelly Consultancy (2005) A brief of accounting systems in China. (Consulted January 2010): http://www.freezonedesign.com/chindelly/news_accountingsystem.html
- Chittenden, F. Hall, G. and Hutchinson, P. (1996) Small firm growth, access to capital markets and financial structure: Review of issues and an empirical investigation. *Small Business Economics* 8(1): 59-67.
- Coleman, J.S. (1988) Social capital in the creation of human capital. *American Journal of Sociology* 94: 95-120.
- Coleman, S. (2000) Access to capital and terms of credit: A comparison of men and women owned small businesses. *Journal of Small Business Management* 38(3): 37-53.
- Coleman, S. and Cohn, R. (2000) Small firms' use of financial leverage: Evidence from the 1993 national survey of small business finances. *Journal of Business Entrepreneurship* 12(3): 81-98.
- Cook, P. (2001) Finance and small and medium-sized enterprise in developing countries. *Journal of Developmental Entrepreneurship* 6(1): 17-40.
- Cooley, P.L. and Edwards, C.E. (1983) The financial objectives of small firms. *American Journal of Small Business* 8(1): 27-31.
- Coricelli, F. (1996) Finance and growth in economies in transition. *European Economic Review* 40: 645-653.
- Cosh, A. and Hughes, A. (1994) Size, financial structure and profitability: UK companies in the 1980s. In Hughes, A. and Storey, D.J. (Eds.) *Finance and the small firm*. London: Routledge.

- Cressy, R. (1995) Business borrowing and control: A theory of entrepreneurial types. *Small Business Economics* 7: 291-300.
- Cressy, R. (1996) Are business start-ups rationed. *Economic Journal* 106(438): 1253-1270.
- Cressy, R. and Olofsson, C. (1997) The financial conditions for Swedish SMEs: Survey and research agenda. *Small Business Economics* 9: 179-194.
- Creswell, J. (1994) *Research design: Qualitative and quantitative approaches*. Thousand Oaks, California: Sage Publications.
- Cull, R. Xu, L.C. and Zhu, T. (2007) Formal finance and trade credit during China's transition, World Bank Policy Research Working Paper 4202. Washington: World Bank.
- Curran, J. and Blackburn, R.A. (2001) *Researching the smaller enterprise*. London: Sage.
- De Kok, J.M.P. and Uhlaner, L.M. (2001) Organizational context and human resource management in the small firm. *Small Business Economics* 17(4): 273-291.
- Deakins, D. Ishaq, M. Smallbone, D. Whittam, G. and Wyper, J. (2007) Ethnic minority businesses in Scotland and the role of social capital. *International Small Business Journal* 25: 307-326
- Demirguc-Kunt, A. and Maksimovic, V. (1999) Institutions, financial markets and firm debt-maturity. *Journal of Financial Economics* 54: 295-336.
- Denzin, N.K. (1978) *The research act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.
- Dillman, D. (2000) *Mail and internet surveys: The tailored design method*. New York: John Wiley and Sons.
- Dobson, W. Kashap, A.K. Lardy, N. and Summers, L.H. (2006) The contradiction in China's gradualist banking reforms/comments and discussion. *Brookings Papers on Economic Activity* 2: 103-162.
- Donaldson, G. (1961) *Corporate debt capacity: A study of corporate debt policy and the determination of corporate debt capacity*, MA Dissertation. Boston: Harvard University.
- Dong, X.Y. Putterman, L. and Unel, B. (2006) Privatization and firm performance: A comparison between rural and urban enterprises in China. *Journal of Comparative Economics* 34: 608-633.
- Dougherty, S. and Herd, R. (2005) *Fast-falling barriers and growing concentration: The emergence of a private economy in China*. Paris: Organisation for Economic Co-Operation and Development.
- Dougherty, S. Herd, R. and He, P. (2007) Has a private sector in China's industry? Evidence from a quarter of a million Chinese firms. *China Economic Review* 18: 309-334.

- Elsas, R. and Krahnen, J.P. (1998) Is relationship lending special? Evidence from credit-file data in Germany. *Journal of Banking and Finance* 22: 1283-1316.
- Fagan, M. and Zhao, S. (2009) SME financing in China: The current situation, problems and possible solutions. *International Journal of Entrepreneurship and Small Business* 8(2): 171-185.
- Fan, J.P.H. Titman, S. and Twite, G. (2006) An international comparison of capital structure and debt maturity choices. Chinese University of Hong Kong and University of Texas in Austin Working Paper.
- Fan, Y. (2002) Guanxi consequences: Personal gains at social cost. *Journal of Business Ethics*, 38(4): 371-380.
- Farrell, D. Lund, S. Rosenfeld, J. Morin, F. Gupta, N. and Greenberg, E. (2006) Putting China's capital to work: The value of financial system reform. McKinsey Global Institute Report.
- Fazzari, S. Hubbard, G. and Petersen, B. (1988) Financing constraints and corporate investment. *Brookings Papers on Economic Activity* 1: 141-195.
- Fielding, N. and Thomas, H. (2001) Qualitative interviewing. In Gilbert, N. (Ed.) *Researching social life*. London: Sage Publications.
- Fisman, R. (2001) Estimating the value of political connections. *American Economic Review* 91(4): 1095-1102.
- Fisman, R. and Love, I. (2003) Trade credit, financial intermediary development, and industry growth. *Journal of Finance* 58(1): 353-374.
- Fluck, Z. Holtz-Eakin, D. and Rosen, H.S. (1998) Where does the money come from? The financing of small entrepreneurial enterprises, Occasional Paper 191. Centre for Policy Research, Maxwell School of Citizenship and Public Affairs: Syracuse University.
- Fornell, C., and Larcker, D. F. (1981) Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research* 18(3): 382-388.
- Fritsch, M. and Mueller, P. (2004) The effects of new business formation on regional development over time. *Regional Studies* 38(8): 961-975.
- Fung, H.G. Liu, Q.F. and Yau, J. (2007) Financing alternatives for Chinese small and medium enterprises: The case for a small and medium enterprise stock market. *China and World Economy* 15(1): 26-42.

- Fung, H.G. Xu, E.X. and Zhang, Q.Z. (2007) On the financial performance of private enterprises in China. *Journal of Developmental Entrepreneurship* 12(4): 399-414.
- Garcia-Herrero, A. Gavila, S. and Santabarbara, D. (2006) China's banking reform: An assessment of its evolution and possible impact. *CESifo Economic Studies* 52(2): 304-363.
- Garnaut, R. Song, L. Yao, Y. and Wang, X. (2001) *Private enterprise in China*. Sydney: Asia Pacific Press.
- Gaskill, L.R. and Van Auken, H.E. (1993) A factor analytic study of the perceived causes of small business failure. *Journal of Small Business Management* 31(4): 18-32.
- Ge, Y. and Qiu, J. (2007) Financial development, bank discrimination and trade credit. *Journal of Banking and Finance* 31: 513-530.
- Gilbert, N. (2009) *Researching social life*. London: Sage.
- Graham J.R. (1996) Debt and the marginal tax rate. *Journal of Financial Economics* 41: 41-73.
- Graham, J.R. (2000) How big are the tax benefits of debt? *Journal of Finance* 55: 1901-1941.
- Granovetter, M. (1985) Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91(3): 481-510.
- Greene, J.C. Caracelli, V.J. and Graham, W.F. (1989) Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis* 11(3): 255-274.
- Greene, J.C. (2007) *Mixed methods in social inquiry*. San Francisco: Wiley.
- Gregory, N. Tenev, S. and Wagle, D. (2000) *China's emerging private enterprises: Prospects for the new century*. Washington: International Finance Corporation.
- Gregory, B.T. Rutherford, M.W. Oswald, S and Gardiner, L. (2005) An empirical investigation of the growth cycle theory of small firm financing. *Journal of Small Business Management* 43(4): 382-392.
- Gu, F.F. Hung, K. and Tse, D.T. (2008) When does guanxi matter? Issues of capitalization and its dark sides. *The Journal of Marketing* 72: 12-28.
- Guardian (2009) Manufacturing contraction slows the Chinese tiger. *The Guardian*. Retrieved 15th Apr 2009, from <http://www.guardian.co.uk/business/2009/jan/04/china-manufacturing-slows>
- Hadjimanolis, A. (2000) An investigation of innovation antecedents in small firms in the context of a small developing country. *R&D Management* 30 (3): 23-245.

- Hall, G. Hutchinson, P. and Michaelas, N. (2000) Industry effects on the determinants of unquoted SMEs' capital structure. *International Journal of the Economics of Business* 7(3): 297-312.
- Hanley, A. and Crook, J. (2005) The role of private knowledge in reducing the information wedge: A research note. *Journal of Business Finance and Accounting* 32(1-2): 415-433.
- Harris, M. and Raviv, A. (1990) Capital structure and the informational role of debt. *Journal of Finance* 45(2): 321-349.
- Harvey, M. and Evans, R. (1995) Forgotten sources of capital for the family-owned business. *Family Business Review* 8(3): 159-175.
- Hasan, I. and Zhou, M.M. (2006) Financial sector development and growth: The Chinese experience, Research Paper No. 2006/85. New York: United Nations, World Institute for Development Economics Research.
- Hatch, N.W. and Dyer, J.H. (2004) Human capital and learning as a source of sustainable competitive advantage. *Strategic Management Journal* 25: 1155-1178.
- He, G. Du, X. Bai, C. and Li, Z. (2009) China microfinance industry report. Beijing: China Association of Microfinance.
- He, X. and Cao, Y. (2007) Understanding high saving rate in China. *China and the World Economy* 15(1): 1-13.
- Herd, R. Pigott, C. and Hill, S. (2010) China's financial sector reforms. Paris: The Organization for Economic Co-Operation and Development.
- Hogan, T. and Hutson, E. (2005) Information asymmetry and capital structure in SMEs: New technology-based firms in the Irish software sector. *Global Finance Journal* 15(3): 369-387.
- Holmes, S. and Kent, P. (1991) An empirical analysis of the financial structure of small and large Australian manufacturing enterprises. *Journal of Small Business Finance* 1(2): 141-154.
- Holmes, S. Dunstan, K. and Dwyer, D. (1994) The cost of debt for small firms: Evidence from Australia. *Journal of Small Business Management* 32(1): 27-35.
- Howorth, C. (2001) Small firms demand for finance: A research note. *International Small Business Journal* 19(4): 78-86.
- Hsu, B.F.C. Arner, D. Wan, Q. and Wang, W. (2005) Banking liberalisation and restructuring in post-WTO China. *Banking and Finance Law Review* 21(1): 23-59.

- Hsu, S. (2009) Introduction. In Li, J. and Hsu, S. (Eds.) *Informal financing in China: American and Chinese perspectives*. Oxford University Press: New York.
- Huang, Y. (2006) Do financing biases matter for the Chinese economy. *Cato Journal* 26(2): 287-306.
- Huang, G. and Song, F.M. (2006) The determinants of capital structure: Evidence from China. *China Economic Review* 17: 14-36.
- Hussain, J. Millman, C. and Matlay, H. (2006) SME financing in the UK and in China: A comparative perspective. *Journal of Small Business and Enterprise Development* 13(4): 584-599.
- Hutchinson, R.W. (1995) The capital structure and investment decision of the small owner-managed firm: Some exploratory issues. *Small Business Economics* 7: 231-239.
- Jalilvand, A. and Harris, R.S. (1984) Corporate behavior in adjusting to capital structure and dividend targets: An econometric study. *Journal of Finance* 39(1): 127-145.
- Jefferson, G.H. Rawski, T.G. Wang, L. and Zheng, Y. (2000) Ownership, productivity change, and financial performance in Chinese industry. *Journal of Comparative Economics* 28: 786-813.
- Jensen, M.C. and Meckling, W.H. (1976) Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics* 3(4): 305-360.
- Jia, J. Sun, Q. and Tong, W.H.S. (2005) Privatization through an overseas listing: Evidence from China's H-share firms. *Financial Management* 34(1): 5-30.
- Jiang, C. Yao, S. and Zhang, Z. (2009) The effects of governance changes on bank efficiency in China: A stochastic distance function approach. *China Economic Review* 20(4): 717-731.
- Jiang, S. (2009) The evolution of informal financing and its prospects. In Li, J. and Hsu, S. (Eds.) *Informal financing in China: American and Chinese perspectives*. Oxford University Press: New York.
- Johnsen, P.C. and McMahon, R.G.P. (2005) Cross-industry differences in SME financing behaviour: An Australian perspective. *Journal of Small Business and Enterprise Development* 12(2): 160-177.
- Johnson, S. McMillan, J. and Woodruff, C. (2002) Property rights and finance. *American Economic Review* 92(5): 1335-1356.
- Jordan, J. Lowe, J. and Taylor, P. (1998) Strategy and financial policy in UK small firms. *Journal of Business, Finance and Accounting* 25(1): 1-27.
- Khwaja, A.I. and Mian, A. (2005) Do lenders favor politically connected firms? Rent provision in an emerging financial market. *Quarterly Journal of Economics* 120(4): 1371-1411.

- King, R. and Levine, R. (1993) Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics* 108: 717-737.
- Kim, E.H. (1978) A mean-variance theory of optimal capital structure and corporate debt capacity. *Journal of Finance* 33(1): 45-63.
- Klapper, L.F. Sarria-Allende, V. and Zaidi, R. (2006) Firm-level analysis of small and medium size enterprise financing in Poland, World Bank Policy Research Working Paper 3984. Washington: World Bank.
- Kotey, B. and Slade, P. (2005) Formal human resource management practices in small growing firms. *Journal of Small Business Management* 43(1): 16-40.
- KPMG (2007) The rise of China's capital markets. Hong Kong: KPMG.
- Kraus, A. and Litzenberger, R.H. (1973) A state-preference model of optimal financial leverage. *Journal of Finance* 28(4): 911-922.
- Kvale, S. (1996) Interviews: An introduction to qualitative research interviewing. London: Sage Publications.
- Kvale, S. (2007) Doing interviews. London: Sage Publications.
- La Porta, R. Lopez-de-Silanes, F. Schleifer, A. and Vishny, R. (1997) Legal determinants of external finance. *Journal of Finance* 52(3): 1131-1150.
- La Porta, R. Lopez-de-Silanes, F. Schleifer, A. and Vishny, R. (1998) Law and finance. *Journal of Political Economy* 106(6): 1113-1155.
- Langenberg, E.A. (2007) Guanxi and business strategy. London: Physica-Verlag.
- Lardy, N. R. (1998) China's unfinished economic revolution. Washington: Brookings Institute.
- Le, N.T.B. and Nguyen, T.V. (2009) The impact of networking on bank financing: The case of small and medium-sized enterprises in Vietnam. *Entrepreneurship, Theory and Practice* 33(4): 867-887.
- LeCornu, M.R. McMahon, G.P. Forsaith, D.M. and Stanger, A.M.J. (1996) The small enterprise financial objective function. *Journal of Small Business Management* 34(3): 1-14.
- Lehman Brown (2004) Compliance, compliance and more compliance...Keeps the Chinese authorities away! Newsletter, Issue 16 November. (Consulted January 2010): <http://www.lehmanbrown.com/Newsletters/PTO/LB16.htm>
- Lehman, Lee and Xu (2010) Frequently asked questions, accounting and auditing: What is the difference between Western and China's accounting standards?(Consulted January 2010):

<http://www.lehmanlaw.com/resource-centre/faqs/accounting-and-auditing/what-is-the-difference-between-western-and-chinas-accounting-standards.html>

- Leigh, L. and Podpiera, R. (2006) The rise of foreign investment in China's banks: Taking stock, IMF Working Papers, 06/292. Washington: IMF.
- Levine, R. and Zervos, S. (1998) Stock markets, banks and economic growth. *American Economic Review* 88: 537-558.
- Li, H. Meng, L. Wang, Q. and Zhou, L.A. (2005) Political connections and firm performance: Evidence from Chinese private firms, Working Paper 2005-E-11-CIG Centre for Institutions and Governance. Hong Kong: Chinese University of Hong Kong.
- Li, K., Yue, H., and L. Zhao (2009) Ownership, institutions, and capital structure: Evidence from China. *Journal of Comparative Economics* 37(3): 471-490.
- Li, J. (2006) The survey of underground financing in China. Shanghai: Renmin Press.
- Li, J. (2009a) Informal finance, underground finance, illegal finance, and economic movement: A national analysis. In Li, J. and Hsu, S. (Eds.) *Informal financing in China: American and Chinese perspectives*. Oxford University Press: New York.
- Li, J. (2009b) Regulating informal finance in China. In Li, J. and Hsu, S. (Eds.) *Informal financing in China: American and Chinese perspectives*. Oxford University Press: New York.
- Liu, C.X. (2007) SME financing in China. Working Paper. Paris: Université Paris X-Nanterre.
- Liu, M.M. Zhang, J.A. and Hu, B. (2006) Domestic VCs versus foreign VCs: A close look at the Chinese venture capital industry. *International Journal of Technology Management* 34(1/2): 161-184.
- Linton, K. (2006) Access to capital in China: Competitive conditions for foreign and domestic firms. SSRN Working Paper Series.
- Lopez-Gracia, J and Aybar-Arias, C. (2000) An empirical approach to the financial behaviour of small and medium sized companies. *Small Business Economics* 14(1): 55-63.
- Luo Y. (1997) Guanxi and performance of foreign-invested enterprises in China: An empirical enquiry. *Management International Review* 37(1): 51-70.
- Luo, Y. (2003) Industrial dynamics and managerial networking in an emerging market: The case of China. *Strategic Management Journal* 24(13): 1315-1327.

- Mackie-Mason, J.K. (1990) Do taxes affect corporate financing decisions? *Journal of Finance* 45: 1471–1492.
- Marshall, C. and Rossman, G.B. (2006) *Designing qualitative research*. Sage: London.
- Marsh, P. (1982) The choice between equity and debt: An empirical study. *Journal of Finance* 37(1): 121-144.
- Matthews, C.H. Vasudevan, D.P. Barton, S.L. and Apana, R. (1994) Capital structure decision making in privately held firms: Beyond the finance paradigm. *Family Business Review* 7(4): 349-367.
- May, T. (2001) *Social research: Issues, methods and process*. Buckingham: OUP.
- McMahon, R. and Stanger, A. (1995) Understanding the small business enterprise financial objective function. *Entrepreneurship: Theory and Practice* 19(4): 21-39.
- McMillan, J. and Woodruff, C. (1999) Interfirm relationships and informal credit in Vietnam. *Quarterly Journal of Economics* 114(4): 1285-1320.
- McMillan, J. and Woodruff, C. (2002) The central role of entrepreneurs in transition economies. *Journal of Economic Perspectives* 16(3): 153-170.
- Michaelas, N. Chittenden, F. and Poutziouris, P. (1999) Financial policy and capital structure choice in UK SMEs: Empirical evidence from company panel data. *Small Business Economics* 12(2): 113-130.
- Miles, M. and Huberman, A. (1994) *Qualitative data analysis: An expanded sourcebook*. London: Sage.
- Miller, J. and B. Glassner (2004) The 'inside' and the 'outside': Finding realities in interviews'. In Silverman, D (Ed.) *Qualitative research: Theory, method, and practice*. London: Sage.
- Modigliani, F. and Miller, M.H. (1958) The cost of capital, corporate finance and the theory of investment. *American Economic Review* 49: 261-297.
- Mu, Y. (2002) *Impediments to SME access to finance and credit guarantee schemes in China*, Working Paper. Washington: The World Bank.
- Mukherjee, T.K. (1992) Financing the three stages of the small business life cycle: A survey. *Journal of Business and Entrepreneurship* 4: 33-42.
- Myers, S. (1984) The capital structure puzzle. *Journal of Finance* 39(3): 575-592.
- Myers, S. (2001) Capital Structure. *The Journal of Economic Perspectives* 15(2): 81-102.
- Myers, S. C. and Majluf, N. S. (1984) Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13(2): 187–221.

- Naughton, B. (2006) *The Chinese economy*. Cambridge: MIT.
- Nee, V. (1992) Organizational dynamics of market transition: Hybrid firms, property rights, and mixed economy in China. *Administrative Science Quarterly* 31(1): 1-27.
- Ng, C.K., Kiholm-Smith, J. and Smith, R.L. (1999) Evidence on the determinants of credit terms used in interfirm trade. *Journal of Finance* 54(3): 1109-1129.
- Ng, V. Yuan, J. and Pacter, P. (2002) Chinese accounting standards: The process of international harmonization, China Financial Reporting Update Issue 01/2002. Shanghai: Deloitte Touche Tohmatsu.
- Nguyen, T.D.K. and Ramachandran, N. (2006) Capital structure in small and medium-sized enterprises: The case of Vietnam. *ASEAN Economic Bulletin* 23(2): 192-211.
- Nguyen, V.T. Le, T.B.N. and Freeman, N.J. (2006) Trust and uncertainty: A study of bank lending to private SMEs in Vietnam. *Asia Pacific Business Review* 12(4): 547-567.
- Norton, E. (1990) Similarities and differences in small and large corporation beliefs about capital structure policy. *Small Business Economics* 2: 229-245.
- Norton, E. (1991) Capital structure and small public firms. *Journal of Business Venturing* 6(4): 287-303.
- OECD (2005) *OECD economic surveys China 2005*. Paris: Organisation for Economic Co-Operation and Development.
- Ooi, J. (1999) The determinants of capital structure evidence on UK property companies. *Journal of Property Investment and Finance* 17(5): 464-480.
- Ortqvist, D. Masli, E.K. Rahman, S.F. and Selvarajah, C. (2006) Determinants of capital structure in new ventures: Evidence from Swedish longitudinal data. *Journal of Developmental Entrepreneurship* 11(4): 277-296.
- Park, S.H. and Luo, Y. (2001) Guanxi and organizational dynamics: Organizational networking in Chinese firms. *Strategic Management Journal* 22(5): 455-477.
- Patton, M. (1990) *Qualitative evaluation and research methods*. London: Sage.
- Paul, S., Whittam, G. and Wyper, J. (2007) The pecking order hypothesis: Does it apply to start-up firms? *Journal of Small Business and Enterprise Development* 14(1): 8-21.
- Peng, M. and Luo, Y. (2000) Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. *Academy of Management Journal* 43(3): 486-501.

- People's Daily (2008) Number of small and medium-sized enterprises hits 42 million. People's Daily, November 12th 2008.
- Perkins, F.C. (1996) Productivity performance and priorities for the reform of China's state-owned enterprises. *The Journal of Development Studies* 32(3): 414-444.
- Petersen, M.A. and Rajan, R.G. (1994) The benefits of lending relationships: Evidence from small business data. *The Journal of Finance* 49(1): 3-37.
- Petersen, M.A. and Rajan, R.J. (1997) Trade credit: Theories and evidence. *The Review of Financial Studies* 10(3): 661-691.
- Petersen, R. and Schuman, J. (1987) Capital structure of growing small firms: A 12-country study on becoming bankable. *International Small Business Journal* 5(4): 10-22.
- Ping, X. (2003) Reforms of China's rural credit cooperatives and policy options. *China Economic Review* 14: 434-442.
- Pissarides, F. (1999) Is lack of funds the main obstacle to growth? EBRD's experience with small and medium-sized businesses in Central and Eastern Europe. *Journal of Business Venturing* 14(5-6): 519-539.
- Pistrui, D. Huang, W. Oksoy, D. Zhao, J. and Welsch, H. (2001) Entrepreneurship in China: Characteristics, attributes, and family forces shaping the emerging private sector. *Family Business Review* 9(2): 141-152.
- Podpiera, R. (2006) Progress in China's banking sector reform: Has bank behavior changed? IMF Working Paper. Washington: IMF.
- Poutziouris, P. Wang, Y. and Chan, S. (2002) Chinese entrepreneurship: The development of small family firms in China. *Journal of Small Business and Enterprise Development* 9 (4): 383-399.
- Pukthuanthong, K. and Walker, T. (2007) Venture capital in China: A culture shock for Western investors. *Management Decision* 45(4): 708-747.
- Qian, Y., Tian, Y., and Wirjanto, T. (2009) Do publicly listed Chinese companies adjust their capital structure toward a target level? *China Economic Review* 20(4): 662-676.
- Redding, S.G. (1990) *The spirit of Chinese capitalism*. New York: de Gruyter.
- Reid, G.C. (1996) Financial structure and the growing small firm: Theoretical underpinning and current evidence. *Small Business Economics* 8(1): 1-7.

- Romano, C.A. Tanewski, G.A. and Kosmas, X.S. (2000) Capital structure decision making: A model for family business. *Journal of Business Venturing* 16(3): 285–310.
- Ross, S.A. (1977) The determination of financial structure: The incentive signalling approach. *Bell Journal of Economics* 8: 23–40.
- Rubin, H. and I. Rubin (2005) *Qualitative interviewing: The art of hearing data*. London: Sage.
- Ryan, G.W. and Bernard, H.R. (2003) Techniques to identify themes. *Field Methods* 15: 85–109.
- Saunders, M. Lewis, P. and Thornhill, A. (2003) *Research methods for business students*. Harlow: Pearson Education.
- Scherr, F.C. Sugrue, T.F. and Ward, J.B. (1993) Financing the small firm startup: Determinants for debt use. *Journal of Small Business Finance* 3(1): 17–36.
- Scott, D.F. (1972) Evidence on the importance of financial structure. *Financial Management* 1(2): 45–50.
- Shen, Y. Shen, M. Xu, Z. and Bai, Y. (2009) Bank size and small and medium-sized enterprise lending: Evidence from China. *World Development* 37(4): 800–811.
- Silverman, D. (2001) *Interpreting qualitative data: Methods for analysing talk, text and interaction*. Sage: London.
- Silverman, D. (2004) *Doing qualitative research: A practical handbook*. London, Sage.
- Sirmon, D.G. and Hitt, M.A. (2003) Managing resources: Linking unique resources, management and wealth creation in family firms. *Entrepreneurship, Theory and Practice* 27(4): 339–58.
- Siu, W.S. Lin, T. Fang, W. and Liu, Z.C. (2006) An institutional analysis of the new product development process of small and medium enterprises (SMEs) in China, Hong Kong and Taiwan. *Industrial Marketing Management* 35: 323–335.
- So, Y.L. and Walker, A. (2006) *Explaining guanxi*. London: Routledge.
- Sood, K. (2004) China's venture capital industry regains confidence, Research Report. LA: The Larta Institute.
- Sorgorb-Mira, F. (2005) How SME uniqueness affects capital structure: Evidence from a 1994–1998 Spanish data panel. *Small Business Economics* 25(5): 447–457.
- Standifird, S.S. and Marshall, R.S. (2000) The transaction cost advantage of guanxi-based business activities. *Journal of World Business* 35(1): 21–42.

- Stiglitz, J.E. and Weiss, A. (1981) Credit rationing in markets with imperfect information. *American Economic Review* 71: 393-410.
- Storey, D.J. (1994) The role of legal status in influencing bank financing and new firm growth. *Applied Economics* 26(2): 129-136.
- Tabachnick, B.G. and Fidell, L.S. (2000) *Using multivariate statistics*. New York: Allyn and Bacon.
- Taggart, R.A. (1977) A model of corporate financing decisions. *Journal of Finance* 32(5): 1467-1484.
- Tang, J. and Ward, A. (2003) *The changing face of Chinese management*. London: Routledge.
- Tam, O.K. (2004) Financing the private sector. In Garnaut, R. and Song, L. (Eds.) *China's third economic transformation*. Abingdon: Routledge Curzon.
- Tan, J. (2001) Innovation and risk-taking in a transitional economy: A comparative study of Chinese managers and entrepreneurs. *Journal of Business Venturing* 16(4): 359-376.
- Tan, J. (2005) Venturing in turbulent water: A historical perspective of economic reform and entrepreneurial transformation. *Journal of Business Venturing* 20(5): 689-794.
- Tan, J. Yang, J. and Veliyath, R. (2009) Particularistic and system trust among small and medium enterprises: A comparative study in China's transition economy. *Journal of Business Venturing* 24(6): 544-557.
- Tashakkori, A. and Teddlie, C. (1998) *Mixed methodology: Combining qualitative and quantitative methods*. Thousand Oaks: Sage Publications.
- Timmons, J.A. (2004) *New venture creation: Entrepreneurship for the 21st century*. New York, McGraw-Hill.
- * Titman, S. and Wessels, R. (1988) The determinants of capital structure choice. *Journal of Finance* 43(1): 1-19.
- Tong, G. and Green, C.J. (2005) Pecking order or trade-off hypothesis? Evidence on the capital structure of Chinese companies. *Applied Economics* 37: 2179-2189.
- Tourangeau, R. and Smith, T.W. (1996) Asking sensitive questions: The impact of data collection mode, question format, and question context. *Public Opinion Quarterly* 60: 275-304.
- Tsai, K. (2002) *Back-alley banking: Private entrepreneurs in China*. New York: Cornell University Press.
- Tsang, E.W.K. (1998) Can guanxi be a source of sustained competitive advantage for doing business in China? *Academy of Management Executive* 12(2): 64-73.

- Usunier, J.C. (1998) *International and cross-cultural management research*. London: Sage.
- Uzzi, B. (1999) Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *American Sociological Review* 64(4): 481-505.
- Van Auken, H.E. and Neeley, L. (1996) Evidence of bootstrap financing among small start-up firms. *Journal of Entrepreneurial and Small Business Finance* 5(3): 235-249.
- Van der Wijst, D. (1989) *Financial structure in small business: Theory, tests and applications*. Berlin: Springer-Verlag.
- Van der Wijst, N. and Thurik, R. (1993) Determinants of small firm debt ratios: An analysis of retail panel data. *Small Business Economics* 5(1): 55-65.
- Van Gennip, P. (2005) Loan extension in China: A rational affair. DNB Working Paper No. 37.
- Verheul, I. and Thurik, R. (2001) Start-up capital: Does gender matter? *Small Business Economics* 16(4): 329-345.
- Vos, E. Yeh, A.J.Y. Carter, S. and Tagg, S. (2007) The happy story of small business financing. *Journal of Banking and Finance* 31: 2648-2672.
- Watson, J. (2006) External funding and firm growth: Comparing female and male controlled SMEs. *Venture Capital* 8(1): 33-49.
- Watson, R. and Wilson, N. (2002) Small and medium size enterprise financing: A note on some of the empirical implications of a pecking order. *Journal of Business Finance and Accounting* 29(3/4): 557-579.
- Wei, S.J. and Wang, T. (1997) The Siamese twins: Do state-owned banks favor state-owned enterprises in China? *China Economic Review* 8(1): 19-29.
- Wiklund, J. and Shepherd, D. (2003) Aspiring for, and achieving growth: The moderating role of resources and opportunities. *Journal of Management Studies* 40(8): 1919-1941.
- Winborg, J. and Landstrom, H. (2001) Financial bootstrapping in small businesses: Examining small business managers' resource acquisition behaviors. *Journal of Business Venturing* 16(3): 235-254.
- Wong, Y.C.R. and Wong, M.L.S. (2001) Competition in China's domestic banking industry. *Cato Journal* 21(1): 19-41.
- Wu, J. (2005) *Chinese economic reform*. Ohio: Thomson.

- Wu, W.P. and Leung, A. (2005) Does a micro-macro link exist between managerial value of reciprocity, social capital and firm performance. *Asia-Pacific Journal of Management* 22(4): 445-463.
- Xiao, W (2002) The new economy and venture capital in China. *Perspectives* 3(6).
- Xin, K.R. and Pearce, J.L. (1996) Guanxi: connections as substitutes for formal institutional support. *Academy of Management Journal* 39(6): 1641-1158.
- Yang, Y. (2004) SOE reform and private sector development in China. In Garnaut, R. and Song, L. (Eds.) *China's third economic transformation*. Abingdon: Routledge Curzon.
- Yeung, I. and Tung, R.L. (1996) Achieving business success in Confucian societies: The importance of guanxi (connections). *Organizational Dynamics* 25(2): 54-65.
- Zeng, S.X. Xie, X.M. and Tam, C.M. (2009) Relationship between cooperation networks and innovation performance of SMEs. *Technovation* 30(3): 181-194.
- Zhang, G. (2008) The choice of formal or informal finance: Evidence from Chengdu, China. *China Economic Review* 19(4): 659-678
- Zhang, Q. and Fung, H.G. (2006) China's social capital and financial performance of private enterprises. *Journal of Small Business and Enterprise Development* 13(2): 198-207.
- Zhao, X. (2005) Chinese banking: The central bank's macroeconomic adjustment policy as seen in data. *China Finance* (February 28) as accessed from finance.sina.com.cn/review/20050228/18171390370.shtml
- Zheng, C., Morrison, M. and O'Neill, G. (2006) An empirical study of high performance HRM practices in Chinese SMEs. *International Journal of Human Resource Management* 17(10): 1772-1803.
- Zheng, C., Morrison, M. and O'Neill, G. (2009) Enhancing Chinese SME performance through innovative HR practices. *Personnel Review* 38(2): 175-194.
- Zoppa, A. and McMahon, R.G.P. (2002) Pecking order theory and the financial structure of manufacturing SMEs from Australia's business longitudinal survey, School of Commerce Research Paper. Adelaide: Flinders University of South Australia.
- Zou, F. and Gao, Y. (2007) Guanxi with government as a source of competitive advantage in mainland China. *Journal of American Academy of Business* 10(2): 158-162.